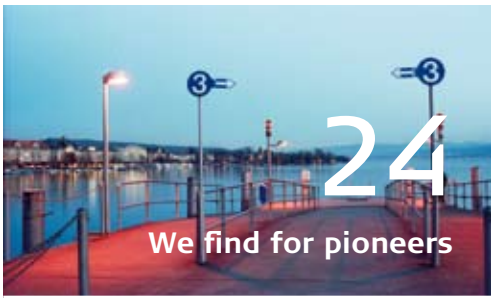
swissgrid

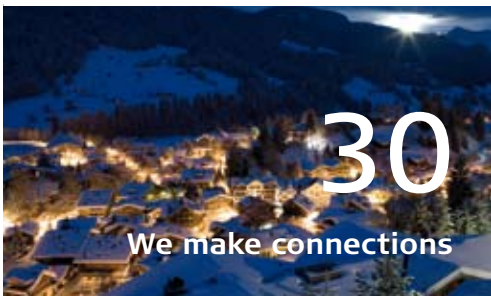
Annual Report 2009

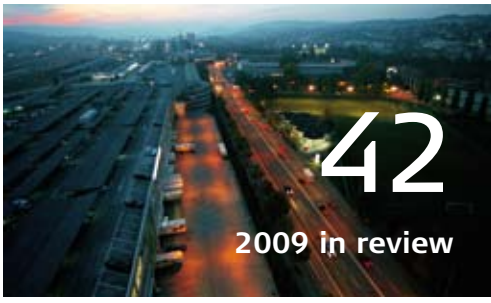
Our mission

Swissgrid's role as Switzerland's national grid company is to guarantee secure, reliable and cost-effective operation of the country's transmission system. In the interests of a competitive economy and a modern society, it ensures Switzerland has a secure supply of electricity 24 hours a day.

Contents







At a glance

Swissgrid – the national grid company

The 2007 Electricity Supply Act (StromVG) brought about a reorganisation of the Swiss electricity market, resulting in the separation of electricity generation, trading, distribution and transmission. As Switzerland's national grid company, Swissgrid is responsible for the safe, reliable and cost-effective operation of the country's transmission system. Swissgrid employs around 250 people from 12 different countries in Frick and Laufenburg. As a member of the European Network of Transmission System Operators for Electricity (ENTSO-E), it is also responsible for coordination and grid usage in the cross-border exchange of electricity in Europe.

Swissgrid is a private limited company operating under Swiss law. It is wholly owned by the Swiss electricity companies Alpiq AG, Alpiq Suisse AG, Axpo AG, BKW FMB Energie AG, Centralschweizerische Kraftwerke AG, Elektrizitäts-Gesellschaft Laufenburg AG, Stadt Zürich (Elektrizitätswerk der Stadt Zürich) and Rätia Energie AG.

Facts and figures on the Swiss transmission system:

Real-time meter data	25,000
Electricity pylons	15,000
Grid length in km	6,700
Real-time grid simulations per day	1,000
Power plants	900
Swissgrid employees	250
Daily hours in operation	24
Grid	1

Well-founded knowledge is power. Swissgrid's specialists are highly qualified. Their mission is to ensure stable operation of the transmission system.

For Swissgrid, IT is an essential and integral part of the infrastructure, facilitating interaction between all participants operating in the electricity market.

Swissgrid Control is the name of the company's new control centre. It is here that all vital decisions to maintain stability in the transmission system are made.

Swissgrid procures ancillary services on the electricity market. These additional services provided by the electricity producers serve to ensure security and stability of supply.

The Swissgrid Control centre is manned twenty-four hours a day by staff whose task is to ensure the secure supply of electricity in Switzerland and Europe.

Electricity is a key driver of the economy. Swissgrid plays an important role in ensuring security of supply.

Grid refers to the electricity network. Swissgrid will be responsible in future for the important tasks of maintaining and expanding the grid.

Regular control energy is the most frequently used ancillary service and is procured by Swissgrid Control operators on the electricity market in order to maintain stability in the transmission system.

Exchanging information at the personal level is still important despite all the technology at our disposal. Swissgrid's specialists are in permanent contact with electricity producers in Switzerland and Europe as well as with transmission system operators in other countries.


Swissgrid

Round-the-clock security of supply

Report of the Chairman of the Board of Directors and the CEO

Dear Reader

In times of change, constants are a welcome factor. We look to institutions which are solid, which stay the course when economic conditions become tough and uncertain and which embody qualities such as responsibility and reliability. Swissgrid is on track to becoming one such institution in Switzerland. Swissgrid is a byword for the reliable and uninterrupted supply of electricity and as such plays an important role in our everyday lives. We have a responsibility to live up to this commitment daily – in the interests of our customers, Switzerland and Europe.

Financial year 2009: sound progress in the liberalised electricity market

The turn of the year 2008/09 marked the achievement of an important milestone for Swissgrid. Overnight from December 31 to January 1, all organisational and technical activities involved in the operation of the Swiss high-voltage grid (220/380 kV) were successfully started up by the national grid company.

From a technical standpoint, Swissgrid accomplished these complex tasks in a masterful fashion, finally making the transition to the liberalised electricity market. Intense preparations and close cooperation with numerous internal and external partners paid dividends.

March 2009 saw the successful completion of a further phase, when 766 Swiss distribution system operators delivered their January 2009 energy data to Swissgrid by the appointed deadline. Expectations were clearly exceeded, also in terms of quality. The data provided by the distribution system operators are important for calculating balance energy and for directly allocating ancillary service costs. They also enhance transparency.

Swissgrid is thus the only institution in Switzerland in a position to determine actual electricity generation and consumption based on real-time measured values from around 750 distribution system operators. This enables more forward-looking planning and creates security in terms of electricity supply. Operation of the transmission system also runs smoothly and efficiently thanks to operating agreements signed with power plant operators and distribution system operators detailing points of contact and all essential measures. This important step paved the way for close and constructive cooperation.

Issuance of the first credits for reactive energy shortly before the end of the year represented a further milestone in the Swiss transmission system. For the first time, cash was exchanged for reactive energy. It is worth mentioning that the voltage situation improved significantly in 2009 compared with the previous year.

Interruption-free operation 365 days a year

Swissgrid provides an important link between electricity generation and consumption. To our immense satisfaction, both the business and residential community enjoyed an uninterrupted supply of electricity in the year under review – 24 hours a day, 365 days of the year. This is no mean feat and is attributable to the sheer hard work and dedication of our staff.

The liberalisation of the electricity market entailed the rollout of many new business processes. Swissgrid's new and future responsibilities necessitated a major overhaul and redesign of the transmission system control centre. Between autumn 2008 and the end of 2009 the centre was completely refurbished before being newly commissioned at the beginning of 2010 under the new name Swissgrid Control. System operation was fully maintained during the refurbishment.

Measures to ensure efficient, cost-effective system operation

Swissgrid bills the costs for its services according to regulated and monitored tariffs. These include service delivery costs as well as a risk-adjusted interest rate on the individual systems.

Electricity prices were again the subject of public debate in 2009. It is important to bear in mind that the issue concerns the country's security of supply. Today we know how much this costs. It is a legitimate question: How much security of supply do we want and how much is this allowed to cost in the future? Swissgrid is intent on keeping the costs of ensuring efficient operation of the transmission system low – in the interests of electricity consumers. To safeguard electricity supplies in the future, it is essential to continuously upgrade and expand the grid infrastructure. Swissgrid is therefore committed to fulfilling its key responsibilities, today and tomorrow.

Swissgrid focused a great deal of attention on ancillary services, including setting up a task force which drew up and implemented more than 25 cost-cutting measures. A key way to reduce costs in this area is to increase liquidity when issuing tenders by expanding the supplier base. This is also the reason why Swissgrid has been participating directly in spot trading on the EEX electricity exchange in Leipzig since mid-2009. The move opened up a further possibility to procure ancillary services at market rates and at optimum cost. Swissgrid was also able to renegotiate and successfully conclude ancillary service supply contracts with over 20 providers by the end of 2009.

Electricity prices in Switzerland are still low compared with other European countries. Swissgrid accounts for less than 10 % of the electricity price for end consumers and therefore makes a significant contribution to ensuring the secure supply of electricity.

Swissgrid is already planning the transmission system of the future

On 1 January 2013 Swissgrid will also become the builder/owner of the national transmission system when it takes over the systems from the electricity companies. Modernisation and expansion of the system will call for sizeable investments over the coming years. Parts of the existing system date back over 40 years on average. In 2009 the Working Group on Power Lines and Security of Supply (AG LVS) drew up a framework for Switzerland's 2015 strategic transmission system along with a simplified and accelerated approval procedure for power line projects for the 50 Hz transmission system. The proposed measures are aimed at alleviating congestion in the Swiss transmission system while also ensuring the transportation of energy from power plants under construction or in the planning stage. This will mean fewer restrictions for producers and traders and greater security of supply.

GO!: strategic course set for the future

Swissgrid's first year in the liberalised electricity market focused on formulating the company's strategy and on developing and expanding operations. The challenge in 2009 was to set the course for Swissgrid's future in order to guarantee the long-term performance capability of the Swiss transmission system. Developing the company into a strong, efficient and fully fledged transmission system operator (TSO) in Switzerland and an important and reliable partner in Europe is a major task.

The strategy project "NEXT" was launched at the end of March, discussed in detail by the Board of Directors and approved in a closed meeting in September 2009. Employees were also called upon to actively participate in the process in order to ensure that valuable know-how was incorporated in Swissgrid's future. Key projects and programmes to be implemented by Swissgrid over the coming years were defined along seven strategic lines. The focal point of these activities is the "GO!" project, which is concerned with Swissgrid's takeover of the grid infrastructure by the end of 2012.

The organisational foundation for the strategy was laid in the third quarter of 2009. Responsibilities were defined and interfaces clearly formulated. Flatter, streamlined management structures were created to allow even greater concentration on core competencies. Communication within and between specialist units will become simpler, faster and more effective.

In today's rapidly changing environment, it is essential that managerial and specialist staff continue to further develop their knowledge and expertise. During the year under review Swissgrid launched its "Leadership Challenge 2009" programme. All executives underwent a self-assessment and completed three training modules in business management, conflict and self-management, and team management. The process was exciting for all participants and enormously important for a dynamic and growing company. Equally important is the cultivation and further development of the corporate culture. The company's corporate values programme "Connect" is aimed at promoting accountability and a culture of exchange and mutual respect.

Strengthen position and maintain interests in Switzerland and Europe

Given Switzerland's important role as an electricity hub in the heart of Europe, security of supply in Switzerland can only be achieved in a European context. Compatibility and coordination with other European systems is therefore key. In 2009 Swissgrid represented Swiss interests in a large number of expert European committees, including ENTSO-E, the European Network of Transmission System Operators for Electricity. Swissgrid performs coordination and grid usage tasks in connection with the European exchange of electricity and is commissioned by ENTSO-E to register international transit flows for settlement of compensation payments for 31 contract parties in Europe.

This involvement by Swissgrid is helping to strengthen Switzerland's position within Europe. In tandem with Amprion and EnBW, Swissgrid launched an important initiative aimed at improving operational security of the European transmission system: a new video communication system (TelePresence), linking up the control centres, was installed in autumn 2009. A plethora of interactive features allow charts, scenarios and calculations to be displayed in real time, simplifying and improving the visualisation, exchange and synchronisation of time-critical and important information between grid operations engineers.

Active dialogue with all stakeholder groups

As Swissgrid goes through this "constituting" phase of market liberalisation, the expectations and demands of all stakeholder groups are especially high. When it assumes responsibility for the grid infrastructure, Swissgrid will become a fully-fledged transmission system operator. As the national grid company, one of its tasks will be to make the public aware of the issues involved in electricity provision and security of supply. Swissgrid intends therefore to intensify dialogue with all stakeholder groups and strengthen its public presence.

2009 was dedicated to customer management: account managers improved personal customer care, and the Customer and Information Centre was expanded in order to become the first point of contact for external queries. The two teams were finally merged organisationally in autumn 2009, with the aim of ensuring consistent customer management across all stakeholder groups and further expanding customer focus.

A workforce dedicated to ensuring security of supply

Swissgrid was again able to count on many partners in 2009. We wish to thank our employees for their dedicated efforts and their contribution to the company's continuing development. Their commitment, enthusiasm and pioneering spirit are critical to Swissgrid's success. To illustrate this, this annual report provides an insight into the exciting and challenging work of five employees. With a qualified and motivated workforce, Swissgrid is well equipped to tackle the major challenges facing it in the coming years. Our number one priority is and will continue to be to ensure a secure supply of electricity in Switzerland every day!

Peter Grüschow
Chairman of the
Board of Directors

Pierre-Alain Graf
CEO

Swissgrid – ensuring security of supply

Electricity round the clock. Today and in the future.

Of course it comes out of the socket: electricity, that is. It is available any time of the day or night, in just the amount that we need. Electricity brings light into our living space, drives machinery and equipment and allows us to live the comfortable life that we've come to appreciate in today's modern society.

What would our everyday lives be like without a reliable supply of electricity? It's seven in the morning, the radio alarm clock fails to go off again and we oversleep. On our way into town the tram suddenly grinds to a halt; after a 30-minute wait, it gets going again. And in the office the power goes off for the third time this week: computer screens go black, business comes to a halt.

Naturally in Switzerland we count on having a secure and reliable supply of electricity. 24 hours a day, 365 days a year. Only a tiny minority of people consider for one moment the incredible effort that goes into providing something that we take for granted.

A look behind the scenes

The electricity transmission system plays a key role in ensuring security of supply. As the national grid company, Swissgrid is responsible today for ensuring secure, reliable and cost-effective operation as well as in future for expanding this important part of the country's infrastructure. The 6,700 km grid connects the power plants to the supply regions. It also acts as the

“electricity superhighway” for transporting energy to and from Europe as well as a platform for electricity trading in the liberalised pan-European market.

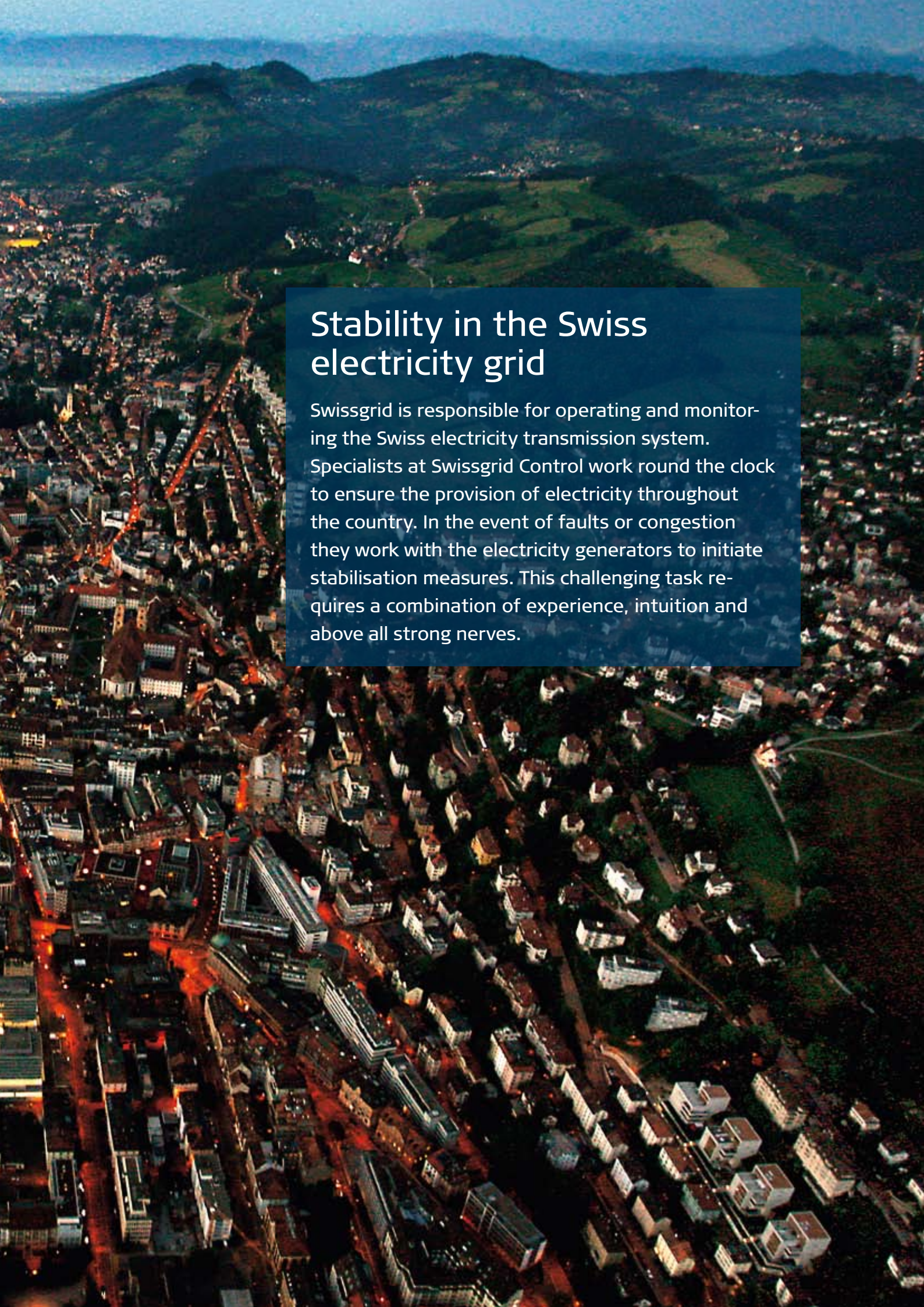
Electricity cannot be generated and stored in large quantities. It is produced in the required amount as and when we need it. The laws of physics dictate the timing: electricity generation and consumption need to be balanced continuously at a constant frequency of 50 Hertz. Without this, the electricity grids would collapse.

Serving the Swiss economy and society

It is the task of the specialists at Swissgrid to maintain this balance in the transmission system at all times. They react to fluctuations in a matter of seconds, ensure the system remains stable and make an important contribution to ensuring a secure electricity supply.

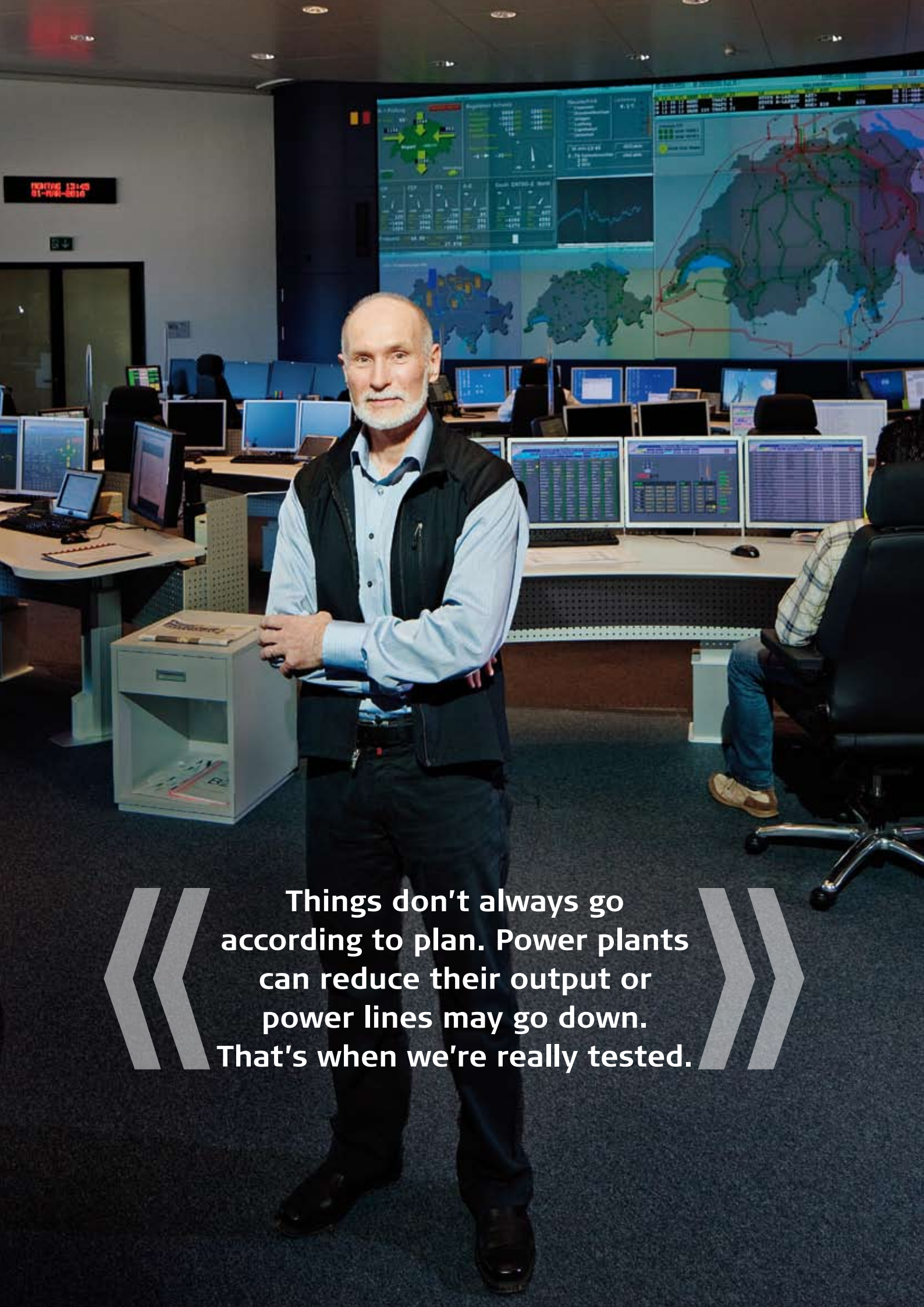
Swissgrid employs around 250 staff, most of whom have a technical or scientific background. Expertise, accountability and reliability are fixed values in their daily working lives. In this annual report, five employees provide an insight into their exciting and at the same time responsible jobs. All Swissgrid employees are committed to serving Switzerland so that we can rely on a secure supply of electricity at all times, today and in the future.


« Pulsating cities.
A Switzerland that
never stands still. »



Stability in the Swiss electricity grid

Swissgrid is responsible for operating and monitoring the Swiss electricity transmission system. Specialists at Swissgrid Control work round the clock to ensure the provision of electricity throughout the country. In the event of faults or congestion they work with the electricity generators to initiate stabilisation measures. This challenging task requires a combination of experience, intuition and above all strong nerves.



« Things don't always go according to plan. Power plants can reduce their output or power lines may go down. That's when we're really tested. »

When things get hectic, take a deep breath and stay calm

In the control room at Swissgrid Control in Laufenburg, system operations manager Arthur Brem and his team are hard at work, making sure the transmission system is stable and by so doing making an important contribution to security of supply in Switzerland. Arthur Brem explains just how demanding grid operation can be.

When I enter the control room at the start of the shift just before five, one look is enough: if the light is dimmed and my colleagues on the night shift are sitting quietly at their workstations, the grid is operating smoothly. However, if a power line has unexpectedly failed, you can literally feel the tension. The room is brightly lit and everyone is either on their feet or on the phone.

It's our turn to take over from the early shift: our colleagues who are nearing the end of their shift brief us on the current state of the system and the night's events. This is important: if a power plant was forced to unexpectedly reduce output or if a transformer failed, that still affects operations in the morning.

Gain an overview

Following the briefing I log onto the control system (the control centre's operating system) from my workstation. I call up the measurement data on the screens in order to gain an initial overview. The large screen on the wall provides all the key information: What is the current grid status? How much electricity are we exporting right now to Italy? Which power lines are active and where do critical situations exist? The five screens at my personal workstation show me the technical details.

Afterwards I study the "Shutdowns" chart. This shows which system is available to me this morning. Lines and other grid elements are sometimes shut down for maintenance or upgrading purposes, for example. It is important to know this, should I have to take action later on.

Control via teleconference

As system operations manager and team leader, I am responsible for security. Our primary goal is to maintain a stable transmission system at all times (see box). My tasks include maintaining a constant overview and spotting congestion or risks early on. If faults occur, I intervene in grid operations. Using model calculations, I determine which lines or transformers need to be switched over, on or off in order to maintain grid stability. Today these and other grid elements are still managed decentrally in the local control centres. At the touch of a button I can connect by teleconference to up to nine colleagues in their respective regions. I pass on my instructions and they perform the control function locally. In the future, Swissgrid Control will be able to manage the entire transmission system centrally from Laufenburg.

When the pulse rises

There are days when my shift is really quiet, when I don't need to make a single phone call. On such occasions I even have time to attend to administrative tasks such as processing master data. But if Switzerland appears in red on the big screen, my pulse starts racing as that means the system state is critical. We only have a short

About the job

A "green Switzerland" means the transmission system is functioning smoothly and efficiently.

Arthur Brem's workplace is at Swissgrid Control in Laufenburg. All vital information on the status of the Swiss transmission system and those of neighbouring countries flows into Swissgrid Control. If everything is running smoothly, Switzerland is displayed in green on the big screen. Yellow means the system is at risk. And if Switzerland turns red, this sparks a sudden rush of activity. The grid is either disrupted or about to be. The specialists intervene to restore stability, i.e. a secure grid state.

The principal task of Arthur Brem and his colleagues is to manage ongoing operation of the system. As system operations manager, Arthur activates switches and draws up security analyses. He makes projections of grid behaviour in the event that a key element (power line, transformer) fails or a critical situation is imminent. He decides on the measures to be taken and bears the responsibility. If Swissgrid declares the existence of a "critical grid situation in Switzerland", he also intervenes in electricity generation and trading in order to maintain grid security.

Grid operation

Maintaining a balance in the transmission system

"Grid operation is a delicate matter," says Arthur Brem. Hard to believe when you look at the massive high-voltage pylons. "In a way, you can compare it with a spider's web: the better it is joined together, the more stable it is. The more joins that are missing, the more likely it is to rupture." The transmission of electricity is hardly likely to cause lines to fall down, as they are securely fixed. However, capacity overload or nature events can lead to line outages and this can destabilise the grid.

Swissgrid Control's job is to maintain a balance between electricity generation and consumption at all times, and at a constant grid frequency of 50 Hertz. This is the case when the amount of electricity being fed into the grid by power plants tallies exactly with the amount of electricity being consumed. This is based on the laws of physics. To explain this in simple terms, take the following everyday situation: If you switch on the stove to boil water for spaghetti or switch on the light, the grid requires additional energy. Immediately.

time to initiate appropriate and targeted measures. Otherwise we risk full or partial outage of the transmission system and normal life in Switzerland would come to a standstill.

A precarious situation arose last New Year's Eve. Shortly after midnight, power consumption in Switzerland dropped suddenly and dramatically, causing the voltage to shoot up to dangerously high levels. It was a worrying situation. There was a risk of load shedding – also recognisable by a spark on a high-voltage pylon – which can damage the grid elements. The team on shift that night responded quickly and correctly. Within minutes we had the situation under control. For Swissgrid Control, this was a somewhat turbulent start to the New Year!

Identify risks early on

For me, an important work tool that enables the timely identification of precarious grid situations is the four-hour preview. The control system conducts security analyses and automatically calculates the effect of the energy exchange planned for that morning on the transmission system. It simulates outages of grid elements and issues a warning as to when limits will be reached or exceeded.

If concrete warnings have been issued for that morning, I reassess the situation manually and start looking for solutions in advance. That helps me respond in a calm and focused manner if things start getting hectic later. This way of working also helps to reduce response times and avoid errors. In critical grid situations, 20 to 40 telephone calls with the local control centres within a short space of time is not unusual. We have to be quick and know exactly what needs to be done.

Energy supplies according to schedule

Energy is transported over the grid based on the schedule submitted the evening before. Short-term trading activities can however lead to an alteration in the schedule. The system operations coordinator is responsible for keeping track of up-to-date values. Consider the following scenario: A power plant operator and an energy trader agree an energy transaction for today between 9:30 – 11:00 am. One thousand megawatts of wind energy are to be imported to Switzerland from northern Germany. The trading partners have already sent the schedule to Swissgrid. We bundle together the submissions from all market participants and generate quarter-hour schedules spread across the whole day. The task of my team is to transport the scheduled deliveries securely across the grid.

If the weather lets us down

Things don't always go according to plan. Power plants suffer disruption or reduce their output because the weather fails to cooperate. As a result, the actual energy transported deviates sharply from the scheduled amount or power lines fail unexpectedly. No matter how the trading transaction or events in the grid unfold during the hours that follow, we have the ongoing task of maintaining grid stability and a balance between the amount of electricity generated and consumed.

Intervention in generation and trading

We have a number of instruments at our disposal to compensate for fluctuations in the transmission system. First, we have what are known as ancillary services. These include "reserve energy", which Swissgrid procures on the market (from the power plant operators). If necessary, the ancillary service provider activates the deployment of this reserve power in order to maintain stability. If these resources prove to be insufficient, we initiate further measures.

About the person

An experienced grid professional with intuition

Arthur Brem (60) comes across as quiet and level-headed when he talks about his job at Swissgrid Control. The hallmark of an experienced grid professional: "Over time I've developed a feeling for the grid, and can literally sense what is possible and where our limits lie." He takes a differentiated view of the transformation in the electricity sector: "Electricity is much more than simply a trading commodity." Energy underlies our modern-day society.

Arthur and his wife live in Laufenburg. They have three grown-up sons and three granddaughters. Enjoying nature and sport is his way of achieving a work/life balance: "I enjoy going on high-alpine ski and mountaineering tours in winter, and in summer I like to go swimming." Thanks to his regular tours he has seen the transmission system in the Alps at close range in many locations.

He has been working in the electricity sector for over 30 years. After an apprenticeship as a technical draughtsman, he went on to work in the high-voltage area before graduating from business school. At Elektrizitätsgesellschaft Laufenburg he worked in power plant deployment and other areas, and later at ETRANS in grid monitoring and coordination.

He has been working in system operations at Swissgrid since the end of 2006. As system operations manager he is responsible, along with other colleagues, for overseeing shift operations. In order to be able to carry out his current tasks, he completed intensive training courses.


Choosing the
right road
to success.

Freedom of choice for electricity consumers

Swissgrid is bringing momentum to the electricity market in Switzerland and creating the preconditions to enable industrial and residential customers to choose their electricity provider. Achieving this depends on the ability to accurately measure and report actual energy and grid master data relating to the Swiss electricity grid. That sounds easy enough. However, gathering this information from the remote and widely distributed substations and processing the data using a database application poses a real challenge.


I've always been
fascinated by massive
volumes of energy.

A secure electricity grid relies on masses of data

Data feature prominently in the everyday working life of Adrian Fuchs. He and his team define the processes used by Swissgrid to process the energy, flow and master data delivered by the electricity grid. Reliable grid operation depends on such data being complete, accurate and up to date at all times.

To put this into perspective: Switzerland's transmission system is around 6,700 kilometres in length, or 3.5 times as long as the entire Swiss national border. The massive pylons carrying the power lines are an important part of the grid. But it is also made up of a host of other technical systems: 120 substations, numerous transformers and control panels with an endless number of components. Using sensors and telecommunications equipment, these grid elements continuously transmit huge quantities of data to Swissgrid in Laufenburg.

Effect on grid security

"We have defined the processes and methods for modelling and processing the data from the grid," explains Adrian Fuchs. This important task also has an impact on security of supply. If the control system were to be "fed" with incomplete or non-current data, this would make it difficult to maintain stability at all times.

Different data categories

When Adrian Fuchs talks about data, he distinguishes between three different categories: grid master data, flow data and energy data. The grid master data define the structure of the grid down to the last detail, so that it can be modelled and simulated on computers. Think of it this way: "You have a power line, followed by a switch, and you also have an isolator, a busbar and other components," Adrian Fuchs describes the inner workings of the grid. The system registers the parameter values of these grid elements, their correlation and their load limits. "Grid master data tend to be statistical values, since the grid doesn't change every day," adds Fuchs.

About the job

Data management – a challenging task

Until the end of 2009 Adrian Fuchs worked as Group Manager, in Data Management Process Support. To illustrate what his job involved, he describes a familiar procedure in the telecommunications sector: "When a customer switches provider, the companies involved exchange technical data. Until this has taken place, the customer is unable to use the new provider's network to make calls or to access the Internet."

In the electricity sector the procedure is virtually the same. If a customer wishes to change to a new electricity provider, the companies involved exchange technical information. "We're talking here about grid master data, flow data and energy data," Adrian continues. There is a huge amount of responsibility involved as these data are needed for system operation among other things, in order to ensure reliable operation of the transmission system and hence guarantee security of supply.

At the beginning of the year Adrian Fuchs took on a new role in Swissgrid's Asset Management division. His work is now focused on Switzerland's future electricity grid.

About the person

"Success is important to me"

Adrian Fuchs (30) enjoys a good laugh, has a positive attitude to life, and knows what he wants: "Success is important to me." He finds challenging tasks motivating, and he wants to advance his career. He gets a good feeling in his stomach when he successfully completes a project and is then ready to take on a new challenge.

Since his early childhood Adrian has lived in Lupfig in the canton of Aargau: "I am well connected in the village, am a member of the gymnastics club and serve in the local fire brigade." In his leisure time you'll also find him at the 300-metre stand practising his rifle shooting, or simply having a good time with his colleagues in the rifle club. He trained and worked as an electrician in the Beznau nuclear power plant for a year.

He then went on to study electrical engineering (majoring in energy engineering) at a university of applied sciences. After completing his studies, he joined Swissgrid in 2004.

That is different in the case of flow data. These data indicate the current state of a certain grid element. A switch can be open or closed. It is also possible to determine the amount of energy currently flowing through a certain power line. The system combines the grid master data with the actual flow data; this allows Swissgrid to carry out various important analyses and calculations – for example, for electricity market auctions or for security calculation purposes in the control centre.

Energy data from the whole of Switzerland

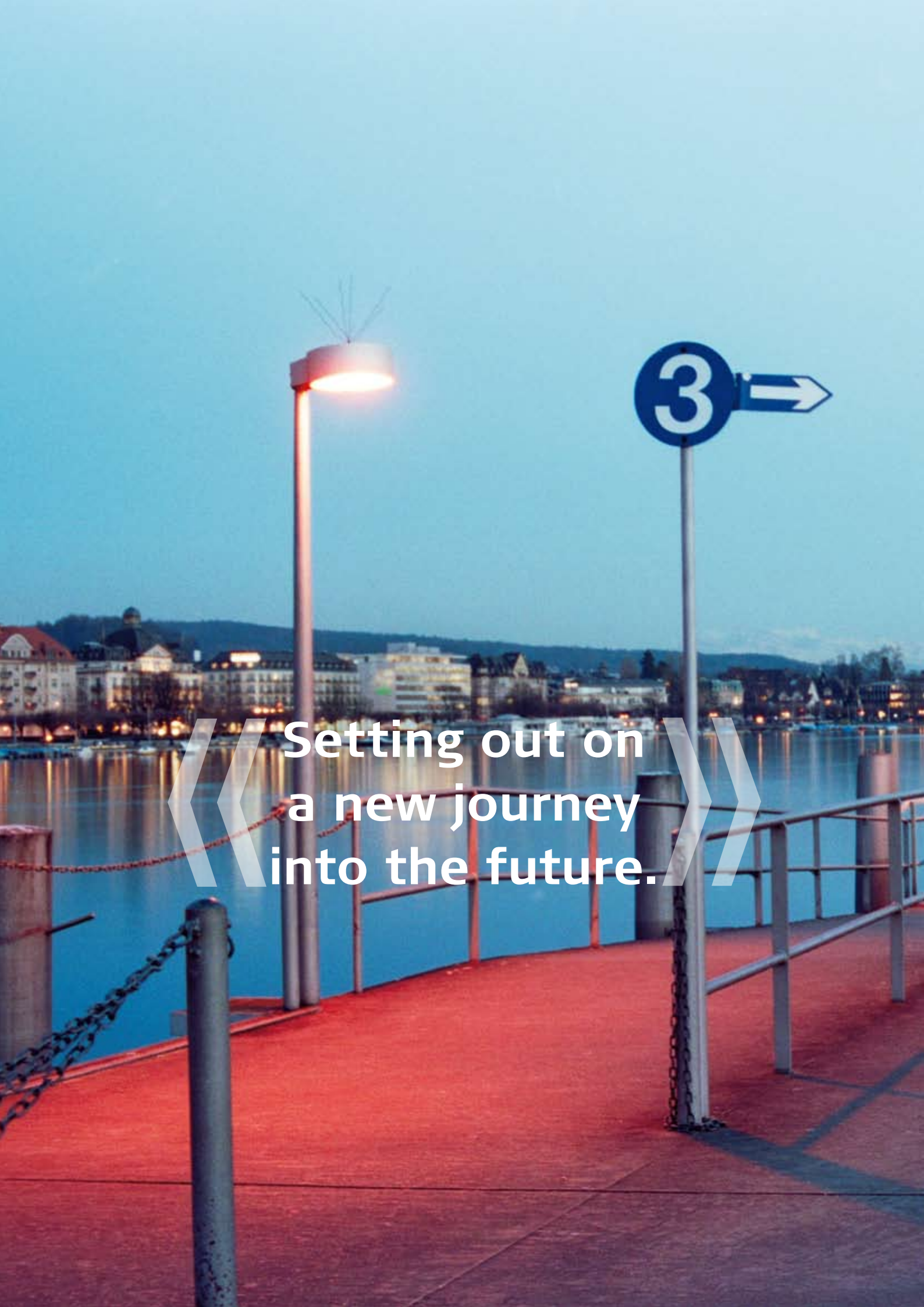
"This past year I have been working mostly with energy data. Compiling such data was a precondition for opening up the electricity market in Switzerland," the group manager goes on to explain. Documenting energy data, including the amount of electricity transported by the grids and the amount delivered to end customers. The data are collected in the 730 distribution systems in Switzerland. Specifically, the grid operators document how much electricity is delivered by which electricity supplier to which customer.

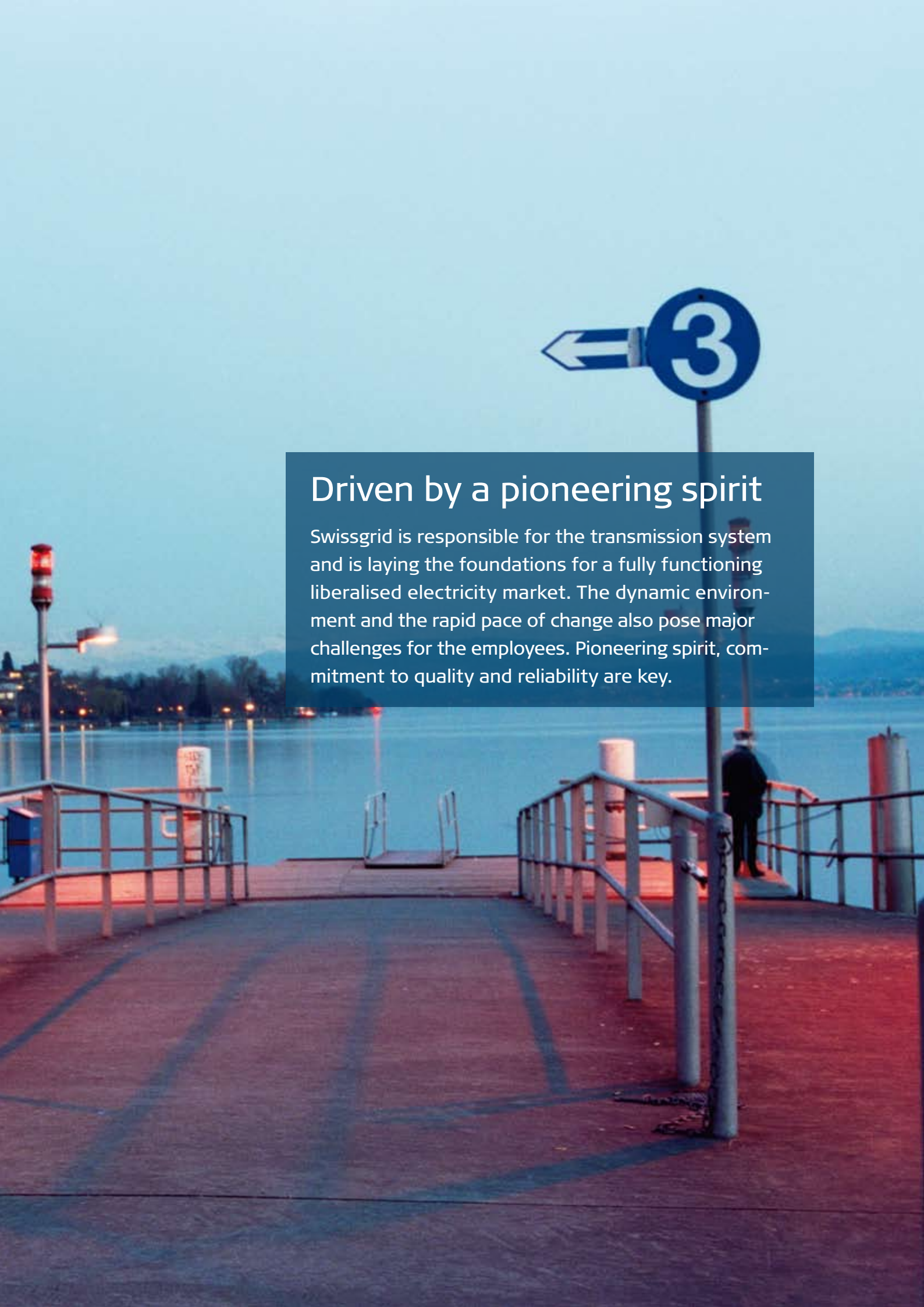
This information is sent to Swissgrid from all over Switzerland; Swissgrid consolidates the data and calculates the amount of energy consumed and generated by the different market players. Grid operations management balances fluctuations between market players' planned and actual volumes, and by so doing, ensures a secure supply of electricity. For this purpose, it organises the provision of reserve energy, or control energy as it is known in technical jargon. Swissgrid can use the gathered energy data to bill the individual market players for the costs of the control energy used as balance energy on a user-pays basis.

When convincing becomes necessary

"Another important task for us involved integrating the 730 distribution system operators in Switzerland," he explains. Delivering energy data to Swissgrid was new for them. It meant extra work and it wasn't always easy from a technical point of view.

For a start, the operators of smaller grids sometimes only work part-time, and they didn't always have an open ear for Swissgrid's concerns: "We organised information events to put the grid operators in the picture and in some cases we also provided practical support. For example, in the case of complex grid configurations." Our efforts paid off. Adrian Fuchs: "We implemented the gathering of the energy data in the system and successfully concluded the project."


Setting out on
a new journey
into the future.



Driven by a pioneering spirit

Swissgrid is responsible for the transmission system and is laying the foundations for a fully functioning liberalised electricity market. The dynamic environment and the rapid pace of change also pose major challenges for the employees. Pioneering spirit, commitment to quality and reliability are key.


For me, it is important that
our employees' development
keeps pace with the
company's development.

The challenge of finding the right specialists

If Swissgrid needs to hire dozens of new specialists at short notice, our human resources experts have their hands full. One such expert is our HR Business Partner Sandra Lauber.

What is your main task? First and foremost, I am responsible for recruiting the right specialists at the right time for the right functions. That's where the adventure in my job begins. I look after the employees from the day they join and throughout their career at Swissgrid until the day they leave. For me, it is important they feel at home and are given the necessary support to enable them to do a good job.

What do you mean by the "right" specialists? Technical qualifications are naturally always function-specific. The typical Swissgrid employee is someone who brings a pioneering spirit and wants to make a difference. He or she must also be flexible, enthusiastic and able to keep up with the pace. When presenting the company to a candidate, I also stress the need for a high level of commitment. In addition, candidates must be capable of working meticulously and reliably. Anything else would not be consistent with our mission as a grid company.

Swissgrid fosters a modern corporate culture. What do you understand by this? We are a young, fast-growing company with an open culture in which everyone is on first-name terms. I really like that about Swissgrid. For

About the job

A tough job can also be fun

Sandra Lauber is HR Business Partner at Swissgrid. In personnel matters Sandra is the first contact partner for members of the Executive Board, management and non-management staff. She is responsible for the end-to-end recruitment process and is also called upon in matters relating to performance evaluation, promotion, conflict or termination of employment. From time to time she also gets involved in project teams where her hands-on experience is required. "Although my work can be extremely demanding, it is important that I enjoy what I do. It's also nice to go home at the end of the day with the feeling that I've made a contribution to Swissgrid's success," says Sandra.

us, respect and recognition alongside dependability and accountability are key corporate values. Working at Swissgrid is demanding and calls for absolute dedication and commitment. The staff have worked extremely hard during the last few years, and we are already confronted by new tasks and responsibilities.

How do the management staff deal with this? When it comes to acknowledging good and above-average performance, our line managers don't just do it in passing. They commend the individuals on their achievements and thank them explicitly, the teams as well. That makes people feel good and also motivates them to stay on the ball.

Is the corporate culture practised to the same degree in all departments? I think it is when it comes to living the values. There are, however, "climatic" differences from site to site. In Laufenburg, where system operations are managed, the atmosphere is much quieter. Ensuring reliable grid operation 24 hours a day 7 days a week requires a high degree of concentration. And I think it's right that these departments have a calm atmosphere.

So it's a very different atmosphere in Frick then ... You can say that again. In Frick we have specialists who are busy working on the future of the transmission system. The atmosphere is extremely dynamic and sometimes even hectic. But Swissgrid needs both qualities to be successful. That is part of our corporate culture.

How important is staff development at Swissgrid? It's extremely important. The focus in 2009 was on executive development, this year the emphasis will be on non-managerial staff development. This has to do with the changing tasks. Through my work I want to make sure people are equipped with the requisite personal and technical skills to successfully master the challenges that lie ahead.

An employer's appeal is also reflected in staff turnover. Where does Swissgrid stand on this? We have a relatively low turnover rate and are on a par with other young start-up companies. Swissgrid's continuing rapid development will also have an impact in terms of resources. Existing functions will change and we will have a lot of new jobs to fill over the next few years.

Where do you find the specialists? Primarily in Switzerland, but also increasingly abroad. Finding the right specialists isn't easy. At one time we had to fill dozens of positions within the space of a few months. System operations specialists are particularly hard to find. Searching is time-consuming and requires a lot of patience.

What's a typical working day for you? I don't have a precisely planned daily routine. Our company is in a phase of transition, which also has an impact on my job. When liberalisation of the electricity market was just beginning, we had to fill several dozen vacancies within a matter of months. At times like that it can become quite hectic, and you have to be flexible.

Our culture

The core values of the Swissgrid culture

Swissgrid currently employs around 250 staff, the majority of whom have a technical or scientific background. "We have people from 12 different countries. Bringing these diverse cultures together is not always easy," says HR Business Partner Sandra Lauber.

Swissgrid is still young, but the way it mastered the set-up phase and the launch of the liberalised market is commendable. A further major challenge now lies ahead: taking over the Swiss transmission system, including maintenance and expansion. The rapid pace of change also affects the corporate culture. "In 2009 we worked with the departments to redefine our corporate values," says Sandra. These take the form of five short, clear-cut guiding principles:

- We take responsibility.
- We are dependable and reliable.
- We actively shape our future and are open to innovation.
- We create a positive and motivating environment.
- We practice respect and recognition.

These values are designed to help managers and non-managers alike to stay focussed as they go about their sometimes hectic and challenging working lives and are also aimed at creating customer satisfaction every day.

About the person

Passionate HR Business Partner

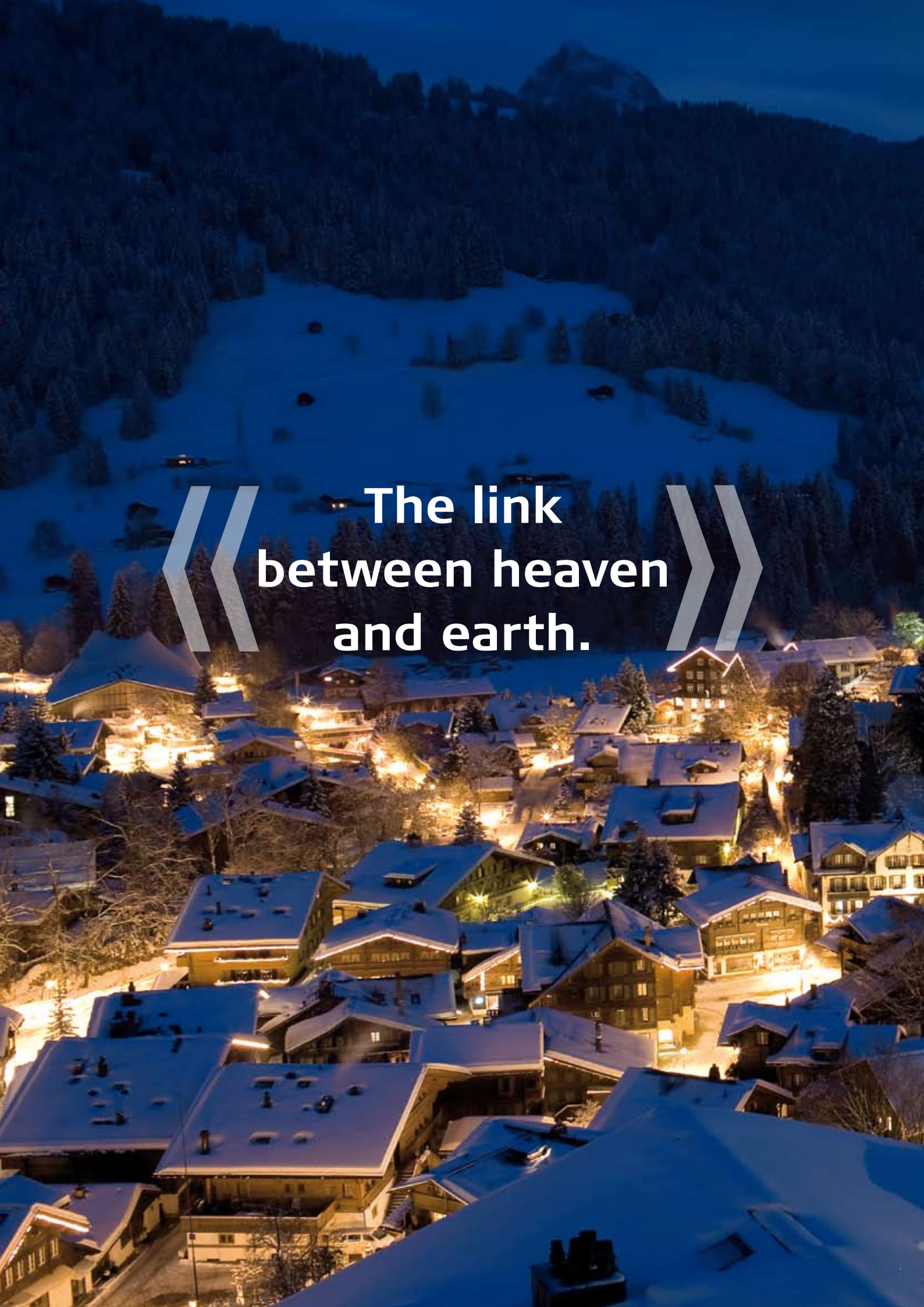
"We perform pioneering work. I can help to make a difference. That's unique," says Sandra Lauber (33). She has been working as HR Business Partner at Swissgrid since summer 2007. Prior to that she performed the same function for a transport company.

She became interested in human resources shortly after completing a commercial apprenticeship; she then decided to take a course in HR management at the University of Applied Sciences in Olten. Further training and development is important to her. Sandra lives in Frick, is married and is a keen reader of crime fiction. Her favourite authors include Stieg Larsson and Simon Beckett.

She also enjoys holidays packed with excitement and adventure. She finds exploring foreign lands and cultures fascinating. "Lying around on the beach is not for me. I have to do something." But the Laubers don't plan their holidays in a big way: "We just fly to a country that interests us, rent a car and hit the road. If we come across an area we like we stay a while, otherwise we continue on our journey."

She has already toured America, Australia and Hawaii, and last year they visited Canada. To chill out after a day at work, She also likes to play the piano.

One final question: What do you think of when you hear the term "security of supply"? When I hire a specialist, that is naturally an important issue. We can only place people in these functions who are meticulous in their work and are extremely resilient. If someone shrugs their shoulders when the red control lamps come on in the control centre, then it's definitely not the right job for them. To make sure we select the most suitable candidates, we conduct assessments, among other things. This way I have the assurance that besides their ability, the chemistry is also right, and the departments concerned will receive real support from their new colleagues.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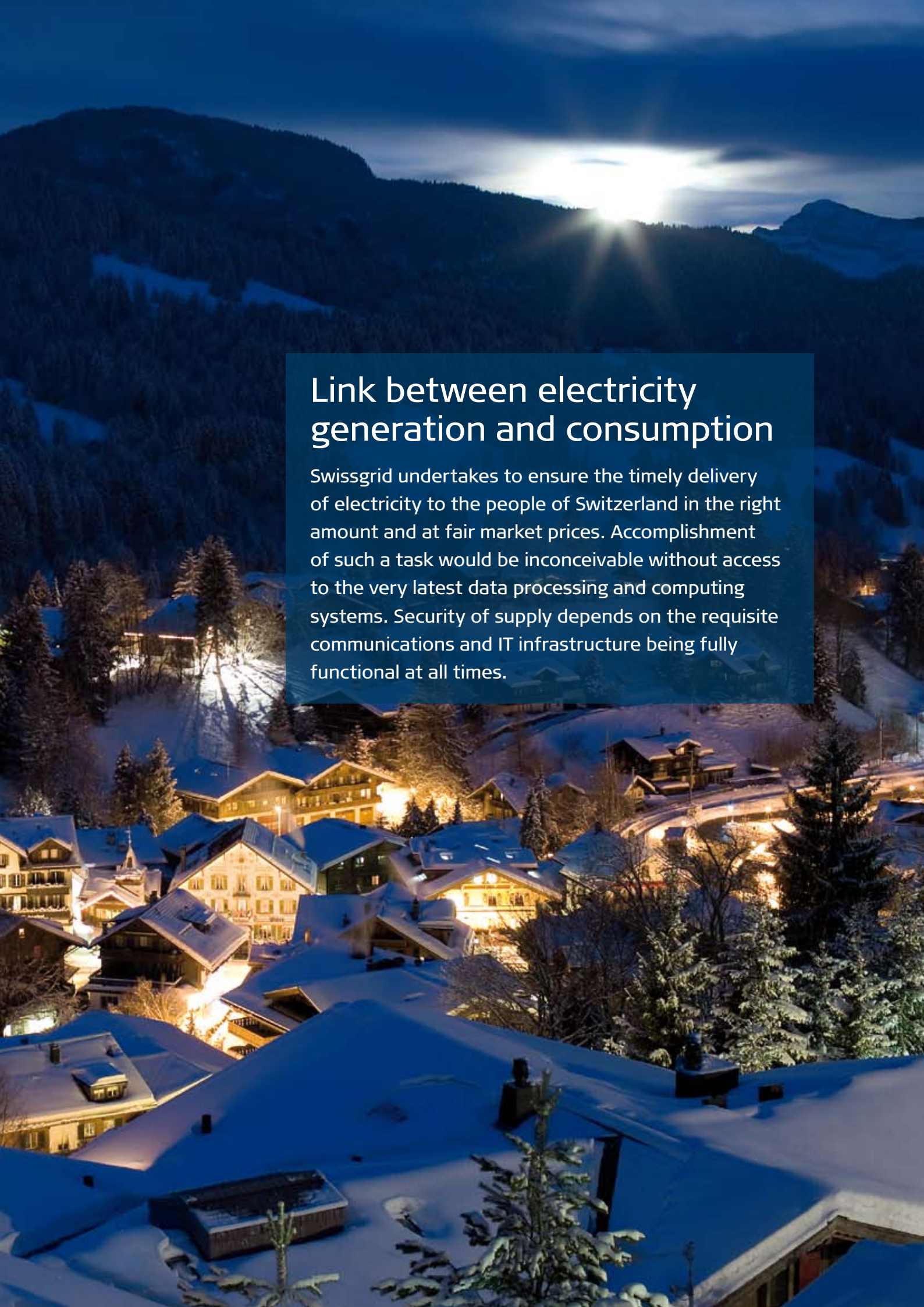


Link between electricity generation and consumption

Swissgrid undertakes to ensure the timely delivery of electricity to the people of Switzerland in the right amount and at fair market prices. Accomplishment of such a task would be inconceivable without access to the very latest data processing and computing systems. Security of supply depends on the requisite communications and IT infrastructure being fully functional at all times.


We get to grips with
the latest technologies
and are always
learning new things.

We can't afford to have a patchwork network

Rapid growth, additional responsibilities and newly equipped workstations also pose a challenge for Sandro Moser and his team. An ongoing task of the networking specialists is to make sure the ICT infrastructure is up to speed with the rapid pace of development of the Swiss grid company.

When people talk about networks, servers and applications, the secure supply of electricity in Switzerland is not the first thing that springs to mind. At Swissgrid it is different. Reliable operation of the electricity transmission system is only possible if the internal computer network and data centre are equipped to the very highest standards. Round-the-clock stable, interruption-free operation is absolutely essential. "We are fully aware of our responsibility," says Sandro Moser. "That is our contribution to ensuring security of supply."

Sandro Moser and his team are responsible for maintaining and upgrading the internal computer network as well as monitoring the data centre's several hundred servers which process the data fed into them from the grid. These include up-to-the-minute meter data on the volume of electricity currently being transported and grid status reports. This information is delivered directly to the screens of the network managers in the control room at Swissgrid Control. Sandro Moser sees himself first and foremost as a service provider: "We are continuously upgrading our ICS systems so that Swissgrid can fulfill its additional responsibilities and the network is always up to speed."

Better safe than sorry

In the network and the data centre we rely on full redundancy: "All key components such as power lines, network nodes and servers are installed in duplicate". Were a component to fail, another would take over immediately and automatically.

The experienced IT specialists attach great importance to having a clearly structured network and server architecture: "We can't afford to have a patchwork network." By that he means a network that evolves over the years and nobody can keep track of it anymore. "We work very systematically and according to strict

standards and everything is fully documented. This has the advantage that should a system nevertheless fail we would be able to rectify the problem faster."

Communication via video

One of Sandro Moser's biggest projects last year was in connection with the construction of the new control centre. His task was to install the network, telephone system and videoconferencing system.

"We deploy one of the most modern videoconferencing systems. The picture is extremely sharp, the sound crystal clear. You feel like you're there talking to the people in person," Moser adds. Video communication facilitates contact with the local control centres and the transmission system operators across Europe. Today collaboration with the project teams of other European grid companies often takes place via videoconference.

Last year Sandro Moser's team completed another important project: "We installed the last components for the emergency operating system." The system runs completely independently of the grid control centre and enables the grid to continue operating even if Swissgrid Control were to suffer a full outage.

Exciting future projects

Since the beginning of the year Sandro Moser has also been in charge of ICT security. "We deploy a sophisticated firewall system to protect ourselves against unauthorised access." While he has every confidence in the security measures that are in place, he likes to test

About the job

Fully familiar with networks, servers and applications

Sandro Moser heads a 12-strong team of network and communications specialists, all of whom work in the ICS division's infrastructure department. "We are responsible among other things for operating and continually upgrading the entire computer network at Swissgrid," he explains. A glance at his job description reveals the sheer scale of the responsibilities shared by him and his staff: the job specification is extensive and covers complex tasks ranging from operation to engineering to consulting. "In addition to operating the network, we are responsible for monitoring the full range of systems from servers to applications to services, as well as managing the infrastructure in the data centre," adds Moser. Laufenburg and Frick house several hundred high-performance servers in a total area of around 500 square metres.

Swissgrid recently adapted its organisational structure in preparation for future challenges. The expansion also affected Sandro Moser's team: "We are now responsible for IT security."

About the person

Roll up your sleeves and get on with it

When his dog nudges his nose at 5.45 in the morning, Sandro Moser (49) knows it's time for his daily jog. Together with his four-legged friend, he sets off from Wettingen, where he lives, up the hill in the direction of Lägern. The exercise and fresh air keep him fit for his job at Swissgrid, where he is responsible for the computer network and other ICT tasks.

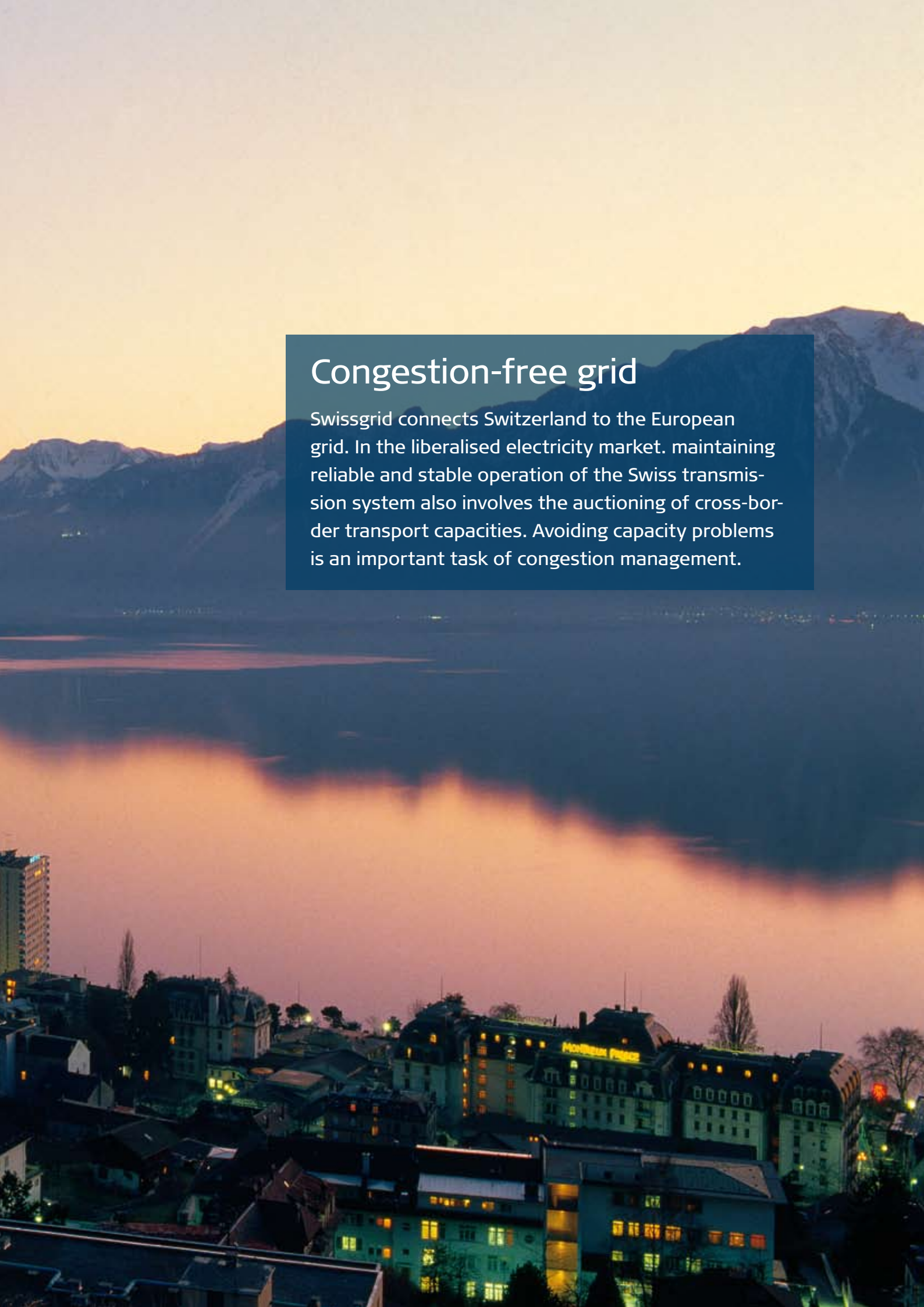
The father of two – a son aged 20 and a daughter aged 18 – describes himself as extremely tenacious: "If I have a complex problem to solve, I don't give up until I've found a proper solution." He likes working with people, but also likes technical challenges: "It is important for me to learn new things as it keeps me on the ball intellectually."

He completed an apprenticeship as a radio/TV electrician. He then went on to study software engineering at a university of applied sciences and afterwards specialised in networks and servers. The team leader enjoys management tasks: "But there are occasions when I roll up my sleeves and get on with it." For instance, last year when he and his team were responsible for equipping the new Swissgrid Control centre with a state-of-the-art videoconferencing system, telephone system and network.

in practice whether it is possible to successfully fend off hacker attacks. For this purpose, external specialists are commissioned to regularly simulate attacks. The findings then help to continuously optimise the security procedures.

For Sandro Moser and his team, the next few years promise to be exciting and rich in challenges. Now that Swissgrid is responsible for the transmission system, it is only a matter of time before grid control is transferred to Laufenburg, where it will be managed centrally. This means additional ICT infrastructure and plenty of work to keep us busy.


A smooth journey
across borders
and beyond.



Congestion-free grid

Swissgrid connects Switzerland to the European grid. In the liberalised electricity market. maintaining reliable and stable operation of the Swiss transmission system also involves the auctioning of cross-border transport capacities. Avoiding capacity problems is an important task of congestion management.

Anyone wishing to sell electricity to Italy must go through Swissgrid to auction transport capacities on the cross-border transmission system.

When grid capacities come under the hammer

The auctioning of transport capacities on the transmission systems has been common practice in the European electricity market for a long time. Swissgrid conducts the auctions for electricity transactions from Switzerland to Italy as well as between Switzerland and Austria. Monica Wiedenhofer's task is to coordinate the auction processes with Italy and to develop them further. She is a specialist in commercial grid management at Swissgrid.

The amount of electricity that can pass through the transmission network is limited by the laws of physics. In the liberalised market, transportation demand vastly exceeds the available grid capacities, resulting all too often in congestion. An important instrument of congestion management are auctions, where transport capacities are auctioned among the market players. Monica Wiedenhofer: "In principle the auctions function in the same way as eBay. Anyone wishing to sell electricity to Italy must go through Swissgrid to auction transport capacities on the cross-border transmission system."

Several transmission system operators involved

The electricity sector introduced auctions in Switzerland in 2006. "Initially at the German and Austrian borders, then two years later at the Italian border as well," explains Monica Wiedenhofer. Responsibility for the auctions that affect Switzerland lies with the transmission system operators in Germany, Austria, Italy and Switzerland. They have split the task amongst themselves. "Swissgrid has taken over the annual, monthly and daily auctions in the direction of Italy," the auction specialist points out. "And we are also responsible for the daily auctions at the Swiss-Austrian border in both directions. "When asked whether auctions also contribute to the security of supply, Monica Wiedenhofer replies with a clear yes: "Auctions allow the transportation of electricity to be planned over the long term; this is important for ensuring secure grid operation."

Monthly auctions with 20 to 30 participants

The monthly auctions, which take place 12 times a year, provide an insight into how the auctions work. "The average number of electricity traders participating is between 20 and 30," Monica Wiedenhofer continues. Only companies who are registered with Swissgrid can participate. They undertake to comply with the strict auction rules and are required to provide a bank guarantee. Swissgrid publishes the auction specifications each month in advance on the Internet. Once that is done, the auction can begin. When the monthly auction is about to start and the participants have logged onto Swissgrid's online platform, things become quite exciting. The next two hours determine who will prevail on

About the person

Auction specialist and football fan

Monica Wiedenhofer (38) lives in Oberrohrdorf and loves her job as a specialist in commercial grid management: "I was looking for a new challenge in a dynamic environment. And that's what I found at Swissgrid." Every day is different and brings with it exciting challenges.

Monica has been working in the electricity industry for almost 6 years. At Axpo AG she dealt with energy billing and managed electricity schedules. At Swissgrid she is responsible for providing support for operational auction processes and developing the auction process between Switzerland and Italy. After completing an apprenticeship, she graduated from the University of Applied Sciences a few years later.

In her free time, the auction specialist enjoys sport: "In the summer I go cycling or hiking." Sometimes she also does a bit of mountain climbing. But the routes have to be secured with ropes, "otherwise it would be too risky for me," she explains. Monica is also a big football fan. She watches as many games as she can during the World Cup, either on TV or live – like in 1998 at the World Cup in France, where she was at the Italy-Cameroon group game. "I remember it well. Italy won 3:0 and France won the World Cup."

price and do business with Italy. The traders now see on their screens how many megawatts of capacity are available. They have a choice of two auction products: the band product with round-the-clock capacities, or the peak product which allows electricity to be transported at peak times from Monday to Friday, 8 am to 8 pm. The parties now have to calculate extremely carefully and place a bid that has a good chance of winning.

Competitors' bids remain closed

Electricity sector auctions are supposed to ensure maximum price efficiency in the exchange of electricity. Participants are required to place "blind" bids, in other words without knowing what their competitors are up to. This rule is intended to prevent strategic bidding. Monica Wiedenhofer explains: "The participants have at their disposal empirical values and, where applicable, their own production costs. They can also find out the latest prices on the electricity exchanges shortly ahead of the auction." They calculate accordingly and place their bid. Anyone who needs to secure the transport capacity at any cost will offer a high price.

As soon as the auction is finished, the system delivers the results: the anxious auction participants now learn whether and at which price they've won the auction. The price for the auctioned capacity is calculated by listing all bids by amount and then working out the market clearing price. The lowest "winning" bid determines the price.

Avoiding congestion

In its hub position in the heart of Europe, Switzerland has an important role to play in the cross-border transportation of electricity. The bulk of the transport is southward, in the direction of Italy. "Our southern neighbour generates much less electricity than it consumes. This makes Italy interesting for market players and exporters of electricity alike," explains Monica Wiedenhofer.

The bulk of this transported electricity goes through Switzerland. To avoid congestion in the transmission system, Swissgrid engages in proactive congestion management. This keeps the grid stable and prevents outages.

The legal basis for electricity auctions is the Electricity Supply Act, which prescribes that congestion in the cross-border transmission system be managed by allocating grid capacities according to market-based allocation procedures, i.e. by means of auctions. Europe has been using market-based procedures for a long time.

Congestion management

Why grid capacities are auctioned

In the liberalised European electricity market, the auctioning of grid capacities has steadily increased over the last few years. At auctions, electricity traders acquire the right to use domestic and foreign transmission systems to transport electricity. The auctions are a direct result of liberalisation, and are the main instrument of congestion management. Congestion in the transmission systems is closely linked to market mechanisms. The capacities required by the market frequently exceed the transport capacity that is actually available.

For economic reasons, market participants buy electricity in those countries where it is cheapest, and sell it where they can achieve the highest returns. For example in Italy, our southern neighbour, which doesn't have any of its own nuclear power plants and is a major importer of electricity. Electricity prices are therefore high, and grid capacities in the direction of Italy are extremely in demand.

Electricity providers throughout Europe want to take advantage of these market opportunities in Italy. Which is where the auctions come in, auctioning the available grid capacities to the market participants. Electricity providers need to acquire these rights in order to be able to conduct their electricity transactions with Italy and transport electricity through Switzerland. In Switzerland, auctions are regulated by the Electricity Supply Act: they must be transparent, in line with the market and non-discriminatory, in order to maintain security of supply.

About the job

Market analysis and auction processes

Monica Wiedenhofer's work is all about auctioning grid capacities for transporting electricity from Switzerland to Italy. "I prepare market analyses for congestion management, develop the auctions and optimise the processes," is how she describes the diversity of her job. Since January 2008 she has been working in the Market Products and Analysis department at Swissgrid, which is part of the Market and Regulation division. She enjoys the varied nature of her job and the contact with the customers, the auction participants.

As part of her job she is in regular contact with Terna, the Italian transmission system operator, with whom she represents the interests of Swissgrid. In consultation with Terna, she defines the transport capacities for the annual and monthly auctions. She works with project groups, answers general questions from auction participants and offers technical support in the event of tricky operating situations in the Auction Office. In addition to a variety of other tasks, she also organises training courses to inform employees and auction participants about the new procedures and regulations.

Electricity auctions continue to grow

One of the more challenging tasks for Monica Wiedenhofer last year was the registration process for the annual auction. The auction had to be completely closed by year-end so that the transportation of electricity could begin punctually in January. "In the annual auction, it is the larger and longer-term transport capacities that come under the hammer," she adds.

Following nomination of the auctioned annual and monthly rights, Swissgrid calculates the capacities available for the daily auction each day. These can vary enormously. A key factor is whether or not the auction participants actually use the purchased capacities. They are not obliged to do so.

Auctions in the electricity sector have a relatively short history and are expected to become much more common in the future. There are already plans to strengthen interaction with the electricity exchanges and to increasingly connect up the electricity markets. The transmission system operators also want to centralise the auctions, which would simplify things for the market participants. Auction specialist Monica Wiedenhofer is busy working on this development. She faces some challenging tasks in the years ahead.

2009 in review

Strategy and success factors

The liberalisation of the electricity market in Switzerland has brought about many changes for the national grid company and expanded the scope of its responsibilities. Swissgrid will take over the grid infrastructure systems by the end of 2012.

As owner, it will not only be responsible for secure operation, but also for maintaining the electricity transmission system in accordance with demand. Swissgrid will have to invest substantial sums over the coming years in the modernisation and expansion of the national transmission system. It will also have to take into account the increasing importance of sustainable electricity production from renewable energy sources and ensure that the modernisation of the grid does not harm the environment.

> The foundations have been laid for Swissgrid's future.

As the national grid company, Swissgrid ensures the security, stability and quality of electricity supply in Switzerland, and aims to become a strong, efficient and fully-fledged transmission system operator in Switzerland and a key, reliable partner in Europe.

Why does the Swiss transmission system need modernising?

The power lines and plants in Switzerland are on average more than 40 years old. Because of its location at the geographical heart of Europe, our country is an electricity hub and has an increasingly important role to play in the cross-border transportation of electricity. Electricity consumption and grid usage are also increasing every year.

Swissgrid's goal is therefore to modernise and expand the Swiss transmission system according to demand and safeguard it for the future. There are 39 expansion projects planned over the next few years: nodes and grid connections are to be strengthened, the removal of energy generated from pumped storage plants is to be improved and individual sections of the transmission system are to be converted from 220 to 380 kV. Further expansion projects are necessary in line with future changes in electricity demand. A total of five to seven billion francs is expected to be invested in these expansion and modernisation projects up to 2030.

How can Swissgrid guarantee efficient and cost-effective transmission system operation?

In comparison with other countries, operating and grid costs in the Swiss transmission system are high, due to structural differences, a higher cost level and difficult topographical conditions as well as the high quality of our grid. A low-cost supply of electricity is a key competitive advantage. That is why Swissgrid wants to gradually reduce its operating costs in the next five to seven years through a package of measures. Swissgrid charges for its services based on regulated and monitored tariffs which include the costs for delivery of the services as well as a risk-adjusted interest rate on the systems. In future, the transmission system will no longer be managed via the 27 regional control centres, but centrally from the new grid control centre Swissgrid Control in Laufenburg. The introduction of this new, integrated operational management concept will reduce the number of interfaces between Swissgrid, power plants and local distribution system operators. This will have a positive impact on costs and operational security.

How can ancillary services be procured in a way that is cost-effective and in line with the market?

Electricity cannot be stored in large quantities by conventional means. Swissgrid is responsible for keeping fluctuations between supply and demand in the grid balanced at all times. In order to do this, it concludes contracts with the power plant operators for the provision of sufficient reserve energy. These contracts enable Swissgrid, as operator of the transmission system, to ensure reliable system operation. Swissgrid plans to use market-oriented measures to reduce procurement costs for these ancillary services in the medium to long term. This goal is to be achieved through demand-related optimisation, improved product design, a broader supplier base and cooperation with other international transmission system operators.

How does Swissgrid operate in the regulatory environment?

Swissgrid operates in a regulated environment. This must be calculable in order for the national grid company to carry out its tasks. ElCom monitors compliance

with electricity legislation on behalf of the Federal Government. According to the law, it can decide on the tariffs and also has influence in other areas. The next phase of market liberalisation and Swissgrid's takeover of the grid infrastructure will require managerial decisions at various different levels.

Planning and planning security will be key success factors for Swissgrid in this important transition phase, particularly when it comes to financing the planned expansion projects through investors and the appropriate interest rate on the infrastructure systems. And at the operational level, binding quality standards need to be defined for transmission system operation.

How will Swissgrid finance its planned investments in the grid?

Swissgrid is one of eight large electricity companies today. In accordance with the law, the cantons and municipalities will hold a majority stake in the "new" national grid company, either directly or indirectly. In order to be able to finance the takeover of the grid infrastructure and the investments in the planned expansion and modernisation projects, Swissgrid will have to increase its fixed assets to around five billion francs by 2030. This will require stable financing with a solid capital base and long-term ownership structures. It will give Swissgrid sufficient autonomy and will make the company attractive to investors.

How does Swissgrid represent Switzerland's interests in the European electricity market?

Today, Switzerland plays an important role in the cross-border and European transfer of electricity, which is why our security of supply is only possible when viewed in a European context. Swissgrid performs important coordination and monitoring functions in the European exchange of electricity and sits on expert international committees; it is a member of ENTSO-E, the European Network of Transmission System Operators for Electricity, and TSO System Security Cooperation, an alliance of eleven transmission system operators.

Swissgrid represents Switzerland's interests in Europe in matters of transmission system operation, harmonisation of technical standards and designing of European regulations which are relevant to security of supply. This secures and strengthens Switzerland's position as an important international electricity hub.

How will Swissgrid maintain a dialogue with its stakeholders?

When it takes over the grid infrastructure, Swissgrid will become a fully-fledged transmission system operator. As the national grid company, one of its tasks will be to make the public aware of the issues involved in electricity supply and security of supply. Swissgrid has set itself the goal of intensifying dialogue with all stakeholders and strengthening its public presence.

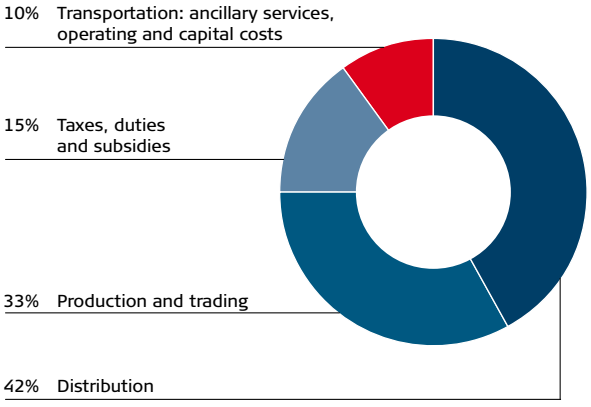
Transmission system management

Transmission system operation in the liberalised electricity market – one year on

The liberalisation of the electricity market has not only led to considerable changes to electricity trading in the last few years, but also to the operation of the Swiss transmission system. In the past, power plants produced electricity relatively close – geographically speaking – to the consumer centres. Today things are different. Customers – in Switzerland these were initially large corporations, later also SMEs and private households – can now obtain their electricity from almost anywhere in Europe. At the same time, intensive Europe-wide trading activities can have a short-term impact on the energy flows in the grids.

Transmission systems used to be operated according to rather static procedures that barely changed from one year to the next. Today, grid activity is much more dynamic. Electricity consumption is increasing steadily and new power plants are being connected all the time. Considerably more attention is paid to security aspects, not least due to the serious power outages in Italy in 2003, as a result of which transmission system operation has become more challenging and short-term interventions are necessary. Operation of the transmission system has to be continually adapted to new circumstances.

Breakdown of the price of electricity



Swissgrid's average share of the household electricity price is around 10%

Swissgrid Control: the key to ensuring security of supply

Swissgrid's new responsibilities, however, also meant that the control centre had to be redesigned. Between autumn 2008 and the end of 2009 the centre was completely refurbished before being commissioned at the beginning of 2010 under the name Swissgrid Control. The new name highlights the importance of its function: it is from here that Swissgrid experts control the Swiss transmission system. One fifth of all cross-border electricity in Central Europe is monitored by Swissgrid Control. Twenty-four hours a day. The Swissgrid operators monitor the Swiss electricity grid from their eleven workstations, keeping it stable through preventive congestion management. If faults arise, they intervene in collaboration with the electricity producers. They also ensure that the Swiss electricity grid maintains an even balance with respect to Europe so that the European grid runs smoothly.

The infrastructure is designed to cope with a major incident: there is an emergency power supply, and loudspeakers are installed in every room to inform the staff of any warnings and alarms. The control centre is earthquake-proof and has an emergency control centre in a separate building. Another is located in neighbouring Frick. The design focused on ergonomics, ensuring optimal light and sound conditions. The servers of the ICT infrastructure are in separate rooms; there are only monitors and keyboards on the desks. Using a touch panel, the operator selects what he wants each display to show. A videoconferencing system and secure phone lines provide the link to colleagues abroad and to the power plants.

Meticulous planning of electricity flows

The transmission system is operated 24 hours a day. Meticulous planning is essential to ensure that everything runs smoothly. Availability planning takes place in collaboration with various partners: those responsible for repair and maintenance, the grid system control centres as representatives of the grid system operators, and the European transmission system operators. The maintenance of power plants in Switzerland and abroad is also taken into consideration. In order to ensure that major, long-term work on the transmission system or on power plants can be carried out smooth-

ly and without conflicting with other activities, operational planning begins several years in advance. Planning takes place every day, 365 days a year, and is also an ongoing process over various different time horizons. This plan will be permanently updated as part of ongoing operation up until the takeover.

When grid elements are taken out of operation, this has an impact on the transport capacities in the transmission system and potentially also on grid security. However, maintenance work is essential for secure and reliable operation. In order to ensure that complicated and time-consuming work has as little impact as possible on system operation, Swissgrid coordinates it early with all parties involved. That way conflicts with other work or interests are kept to a minimum.

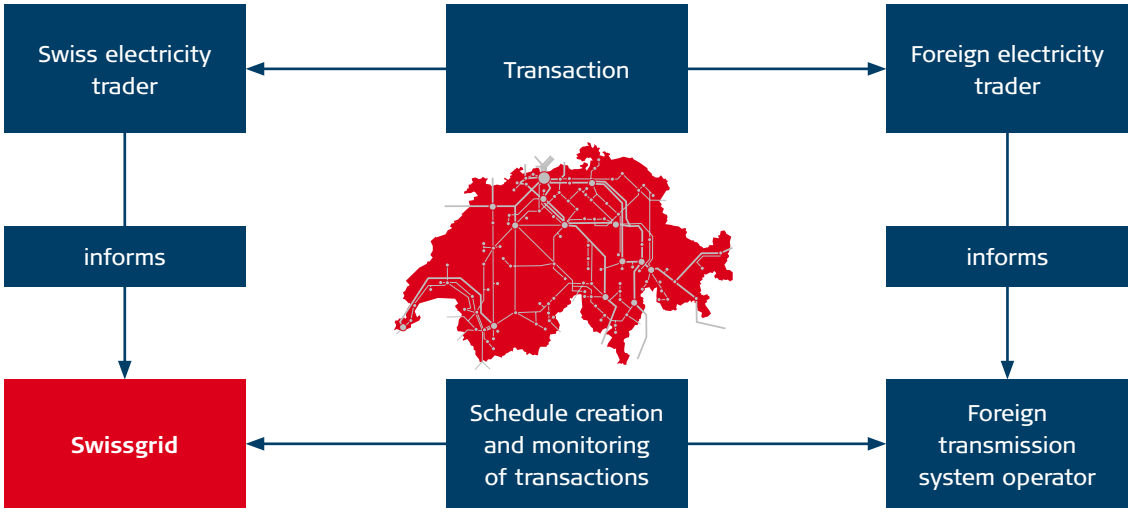
Wherever possible, these activities are scheduled for the same time and the project plan is optimised so that as few lines as possible have to be disconnected. Checks are also carried out to determine whether provisional lines are feasible and worthwhile. Maintenance work on lines and substations is ideally carried out at the same time as maintenance on power plants. Depending on the time of year, scheduling conflicts can still occur as a result of the weather. Maintenance work is also a challenge in the summer when the snow is melting and there is therefore a high level of production from hydropower. The earlier these challenges are identified, the better prepared the various players are.

Secure electricity supply requires good teamwork

In 2009, Swissgrid was able to considerably improve coordination with its neighbouring countries through a series of measures. Planning for large projects is started early in collaboration with the Italian and French transmission system operators, even before annual planning. Swissgrid now also participates in the annual coordination between Germany and Austria.

In a second step, Swissgrid introduced a replacement for the existing coordination and communication of power plant shutdowns in order to fulfil the mandate stipulated in the Electricity Supply Act. Swissgrid provides an Internet platform where all power plant operators, those responsible for repair and maintenance and those responsible for ancillary services can enter their information and keep it updated. Swissgrid also uses this platform to publish relevant information such as congestion warnings. This ensures that complete and up-to-date information is available at all times in a standardised format.

The secure exchange of energy requires careful planning



Just like an SBB freight train, electricity transportation also needs a schedule to ensure that energy exchange within Switzerland and with other countries goes smoothly.

A case study

An unconventional solution for the Cleuson-Dixence pumped storage power plant

In the Grande Dixence reservoir in the Valais Alps, the water from 35 Valais glaciers – from the edges of the Mattertal around Zermatt to the Val d'Hérens – is collected to generate electrical energy. At a height of 285 metres, it is the world's highest impoundment dam with a capacity of 400 million cubic metres.

The Cleuson-Dixence pumped storage power plant is part of this vast facility and was built as part of an expansion project between 1993 and 1998 in order to meet the demand for peak load energy. There was a serious accident in December 2000 and the pressure pipe was badly damaged. Due to extensive investigations and repair work, the plant remained out of operation until it was re-commissioned in January 2010.

In the nerve centre of the Bieudron power plant, three Pelton turbines convert water that falls from a height of 1883 metres into electrical energy. This can generate a maximum output of 1269 megawatts, which is equivalent to the output from the Leibstadt nuclear power plant. The energy generated is fed into the Swiss transmission system via the Chamoson 380 kV substation.

The challenges for transmission system operation

The energy fed in at Chamoson is transported away via a 147-kilometre long 380 kV line – around Lake Geneva to the interconnected French node Bois Tollot. It is also transported via a 380/220 kV interconnecting transformer into the subordinate 220 kV grid. The 380 kV line can carry the full output from the power plant, but the transformer, with a capacity of 700 MVA, can only manage just under half of that output. From the point of view of transmission system operation, the reliable and secure removal of the generated energy would only have been guaranteed up to that production limit without the introduction of suitable measures.

The security concept (n-1 security) stipulates that the transformer in the Chamoson substation must not be overloaded, even in the event of a fault – for example an outage of the 380 kV line between Chamoson and Bois Tollot – as it must be able to deal with the entire production capacity in the event of a fault. This would mean that the power plant would be permanently limited to producing 50 per cent of its full capacity, which is of course unacceptable. A solution therefore had to be found together with the power plant operators which would enable the power plant to operate at full capacity and ensure continued reliable and secure transmission system operation in the Valais region.

The solution

The critical and restrictive element in the chain is the 700 MVA transformer in the Chamoson substation. It must be protected against overload as production is carried out in the Bieudron control centre. Because this requires quick decisions and rapid response times, an automatic monitoring and control mechanism was implemented in the secondary technology of the transformer field. In the event of overload, this has a direct effect on the turbine control technology: current production is reduced to the permissible transmission capacity within seconds and during very high production, one of the three generators is also separated from the grid. Several practical tests were carried out which demonstrated the smooth running and effectiveness of this facility.

To ensure that the grid status monitoring system and the grid security forecasts at Swissgrid Control in Laufenburg display authentic results even during periods of high production in Cleuson-Dixence, the control system was also modified. Specifically, the logic described was implemented in the corresponding applications. Thanks to the use of this particularly unconventional solution, the grid security loophole resulting from the commercial deployment of the Cleuson-Dixence pumped storage power plant can be resolved until the urgently required grid expansion in Valais has been completed.

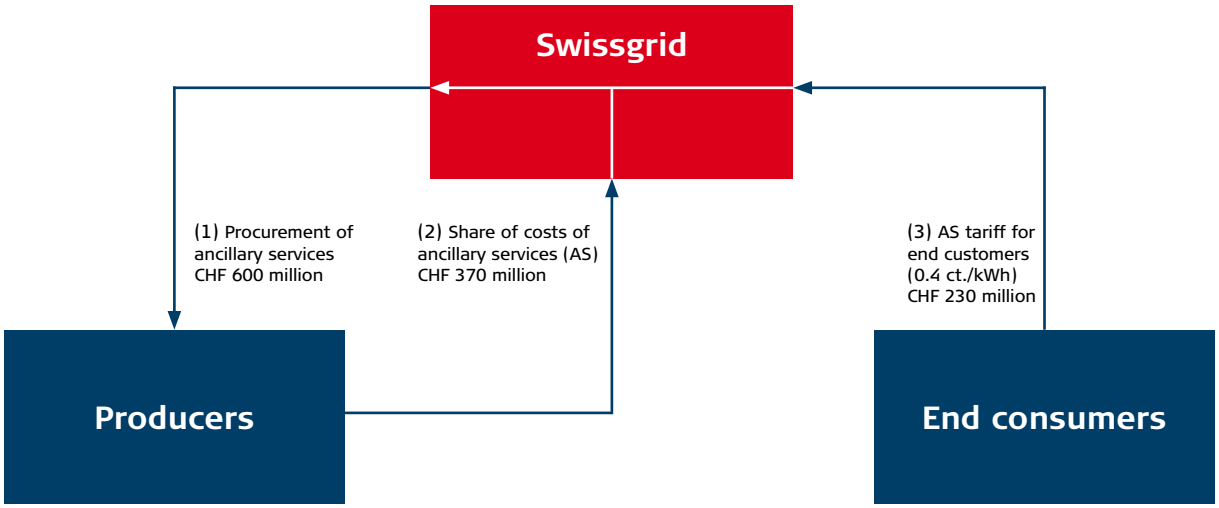
Successful measures to reduce the cost of ancillary services

Swissgrid successfully took over and reorganised the procurement of ancillary services on 1 January 2009; purchasing of ancillary services will now be coordinated in accordance with the market. The central provision of control energy, voltage support, active power losses and black-start/island operation will improve ancillary services demonstrably in order to maintain the security of transmission system operation. Swissgrid monitors the provision of the required power reserves 24 hours a day so that it can request power and feed it into the transmission system if necessary. In 2009, provisioning of reserves, power system control and active power losses were assigned to the most favourable bidders during more than 180 tenders. The tenders took place throughout the year, on time and without any problems, thus ensuring security of supply at all times.

Improved rules reduce procurement costs

In 2009, Swissgrid implemented a number of measures aimed at reducing procurement costs. Power provisioning was modified and additional incentives were created to encourage the balance groups to improve the accuracy of their consumption forecasts. The introduction of an upper price limit for tenders is also worthy of mention. In order to expand its pool of providers, Swissgrid held many discussions with potential suppliers. By the end of the year, supply contracts for ancillary services will have been completed with more than 20 suppliers; more potential suppliers are to be expected in the near future. In collaboration with operators of foreign control zones, Swissgrid also looked into the possibility of cross-border deliveries of ancillary services. Lastly, all framework agreements for the supply of control energy were renegotiated and concluded by the end of 2009. With this package of measures, Swissgrid is making an important contribution towards further reducing the price of electricity for end consumers.

Ancillary services: what Swissgrid takes, it gives back



(1) Swissgrid purchases ancillary services from electricity producers to the tune of around CHF 600 million in order to balance the transmission system.

(2) Power plants with a capacity of more than 50 MW contribute around CHF 370 million of those costs.

(3) The remaining CHF 230 million is paid by the end customers via the ancillary services tariff.

Swissgrid operates in a fully cost-neutral capacity as the collection office for ancillary services.

The figures are rounded values from the 2009 financial year.

Trends and initiatives in Europe

Impact of the EU's Third Energy Package on Switzerland

The third package of liberalisation measures from the European Union (EU), which was approved in 2009, is intended to accelerate the creation of a European domestic electricity market. It must be implemented into the national legislation of all EU member states by March 2011. Changes in EU legislation also have an impact on Switzerland, even though we are not a member of the European Union, because Switzerland is an inseparable part of the European electricity system. Also, our country has always played a key role in Europe's electricity industry thanks to its flexible hydropower. The most important changes as a result of the new EU guidelines are listed below:

Unbundling: Switzerland leads by example

The new EU legislation provides for a stricter form of unbundling for transmission system operators. Switzerland's approach – the creation of the national grid company Swissgrid – is highly respected and is regarded as exemplary. Once Swissgrid has taken ownership of the transmission system, Switzerland will be in a position to meet the new EU requirements regarding unbundling.

ENTSO-E and ACER as new cooperation groups

The EU's Third Energy Package will institutionalise cooperation within the European electricity sector. This relates to cooperation between transmission system operators and also between regulators, and will enable activities to be better coordinated. The ENTSO-E association was founded on a voluntary basis at the beginning of last year; Swissgrid is one of the founding members and represents Swiss interests on the relevant committees.

Standardisation of the network codes

The Third Energy Package provides for another change: in future, transmission system operators will develop network codes for commercial and technical aspects and coordinate them with the regulators and all stakeholder groups. The codes will then apply throughout Europe and will guarantee compatibility in the various different markets. In accordance with a specific legal procedure (comitology procedure), the EU Commission can declare the network codes binding for the entire EU. Swissgrid has already been involved in developing European standards and implementing them in its own grid in the past, and will continue to play an active role in this regard in the future.

The importance of the Swiss hub

The increasingly extensive optimisation of power plant deployment and the expansion of renewable energies have resulted in higher demands on the electricity grid across Europe. A coordinated expansion plan is therefore essential. The transmission system operators are currently working on a 10-year plan, supported by Swiss legislation. Along the lines of the European regulations, Swissgrid is also drawing up multi-year plans, which should guarantee an efficient expansion of the European grid in collaboration with the transmission system operators in neighbouring countries.

Measures for a secure cross-border electricity grid

Italy is the largest importer of electricity in Europe. However, capacities for transmitting electricity to Italy do not cover the higher demand, which is why auctions are held at all Italian borders, both for import and export.

Together with the transmission system operators involved, Swissgrid has the important task of making the allocation of capacity as efficient as possible, in order to ensure that the effort involved for market participants in the auctioning of transmission capacities is kept as low as possible. The introduction of common auction rules for all Italian borders in 2008 was already an important first step.

The transmission system operators are currently responsible for carrying out the auctions. Each transmission system operator is responsible for at least one border and direction; Swissgrid, for example, is responsible for the auctions in the direction Switzerland-Italy. But as a result, market participants have to use several different auction systems for transactions at the Italian border.

A new security body for Europe – Transmission System Operator Security Cooperation

At the end of 2008, eleven transmission system operators in Europe – including Swissgrid – set up the organisation Transmission System Operator Security Cooperation (TSC). The catalyst was the fact that the transmission systems in Switzerland, as in large parts of Europe, are operating at the limit of their capacity, a situation that can only be managed by intensive cooperation. The commitment of TSC is compatible with other European initiatives which have been taken recently.

The aim is to increase system and supply security by ensuring closer cooperation between the transmission system operators.

Intense exchange among security experts

TSC created the Security Panel. This security body is made up of experts who meet on a monthly basis to exchange knowledge and to give each other an insight into aspects of grid operation. The function of this body is to coordinate procedures and develop improvement measures, with the aim of keeping congestion to a minimum and achieving a high standard of security in the European electricity grid. At the same time, TSC has started developing a shared tool, the CTDS system (Common Tool for Data exchange and Security assessments), which will enable security calculations to be carried out. The relevant grid operators will receive the results at the same time and in the same format, which will enable them to coordinate and implement the most effective measures together.

Complete overview of the European electricity grids in real time

In July 2009, TSC commissioned the RAAS Real-Time Awareness & Alarm System for Central Europe. RAAS provides a complete real-time overview of the situation in the electricity grids in the eleven control zones. The German transmission system operators have also been providing their wind energy data to all TSC members since August 2009, which means that Austria, the Czech Republic, Poland, the Netherlands and Switzerland can have a complete overview of the European electricity network in real time. TSC sees itself as an open organisation. Other European transmission system operators have already expressed a keen interest, and member numbers are likely to increase in the near future.

Renewable energies

First year of cost-covering feed-in remuneration – initial experiences

Since 1 January 2009, Switzerland has had a new incentive programme for renewable energies, cost-covering remuneration for feed-in to the grid (CRF), which is managed by Swissgrid on behalf of the Federal Government. The CRF foundation was set up to receive and manage the surcharges on the cost of electricity in order to promote renewable energies in accordance with the Energy Act and the Electricity Supply Act.

Due to the unexpectedly high number of applications, the Swiss Federal Office of Energy decided to stop the general subsidy programme just a month after it was introduced. Applications for CRF were accepted from May 2008, but interest in the new subsidies was so high that the majority of the photovoltaic projects submitted were placed on a waiting list just a few days after registration began.

Applications for projects involving biomass, hydropower and wind have also been placed on the waiting list since 1 February 2009.

Photovoltaic stabilisation programme

On 11 February 2009, the Federal Government agreed on the second package of measures aimed at improving the economic situation in Switzerland. In this context, the subsidy programme for photovoltaic plants was launched in April 2009 with investment assistance of around 20 million francs. Photovoltaic plants that were registered for CRF in 2008 but were put on the waiting list will also be able to benefit from this programme.

Interest in the stabilisation programme for photovoltaic plants was also so tremendous that Swissgrid had already received more than 1500 applications by 11 May 2009; the available funds of 20 million francs were used up within an extremely short period of time.

First remuneration payments made on time

Swissgrid pays out the CRF quarterly based on production data recorded in the guarantee of origin system. The first payments were made in June 2009. Timely payment of CRF required timely delivery of production data to Swissgrid by the distribution system operators, which went smoothly.

What now?

All projects will remain on the waiting list until there is a free space or the funding level for CRF is increased, which would require a corresponding change in the law. Plants that receive a positive decision must submit a project progress and commissioning notification by the deadlines defined in the Energy Ordinance. If one of the deadlines is not met, they will lose their eligibility for funding. If this happens, projects that are ready to be implemented or have already been implemented will move up the list. The first deadlines will expire in 2010. CRF is financed by the surcharge on the cost of electricity (currently 0.45 ct./kWh), which must be limited to a maximum of 0.6 ct./kWh for consumers in accordance with the Energy Act.

New from 1 January 2010: change from gross to net measurement

Thus far, all CRF-eligible electricity production plants have been measured directly at the generator. However, this gross measurement is not compatible with the guarantee of origin system and the standard method of billing used on the green electricity market. The measurement is now carried out at the feed-in point according to the net principle, in accordance with the Metering Code of the Association of Swiss Electricity Companies. That way the energy installation's own consumption is deducted from the measurement. As own consumption was previously included in calculation of the CRF remuneration rates, these need to be corrected following the change from gross to net measurement.

Guarantees of origin: making sure green electricity really is green

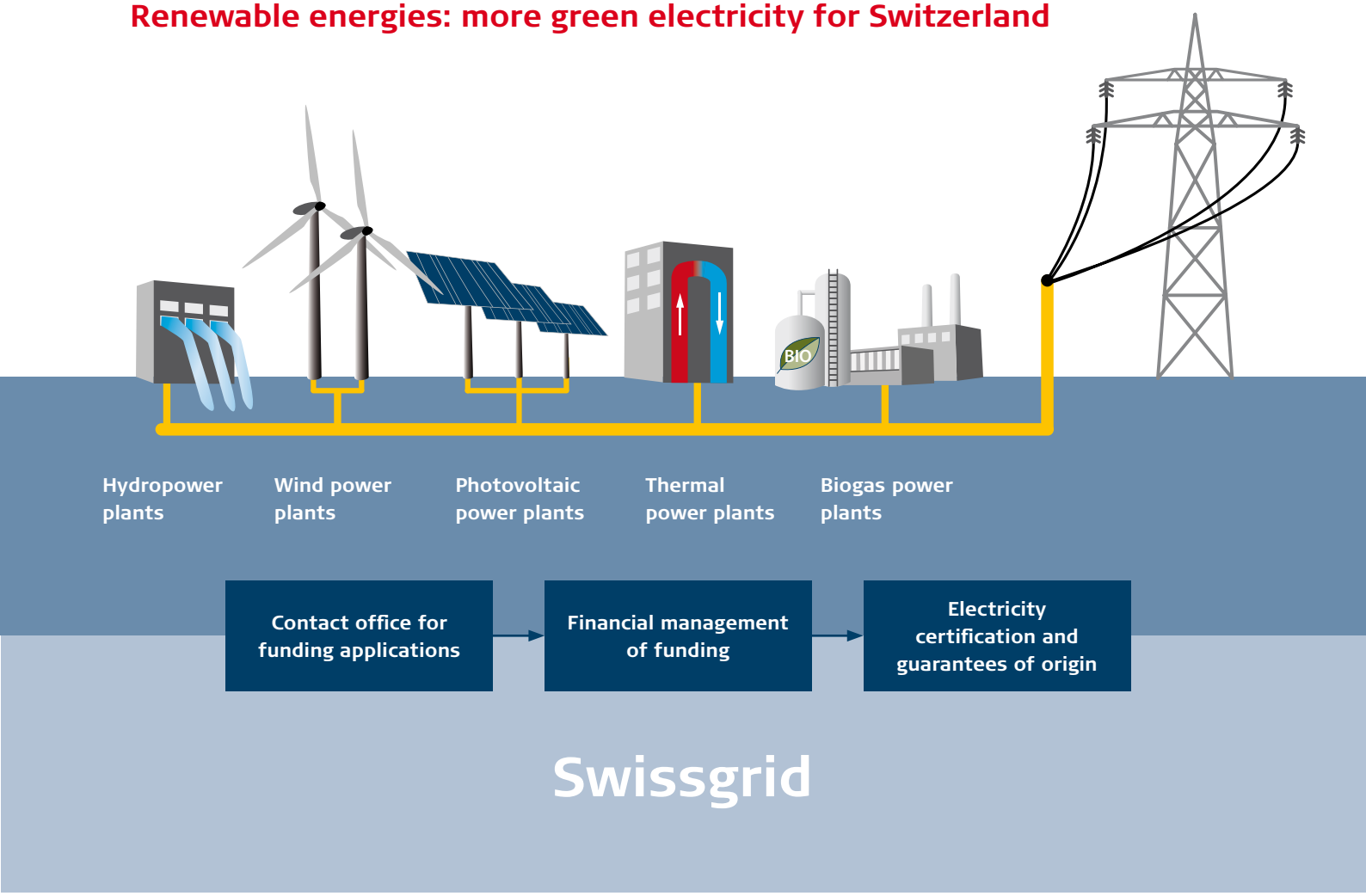
Guarantees of origin are an instrument for facilitating international trading in electricity generated from renewable energies. In Switzerland, these guarantees are extremely important in connection with the exporting of electricity generated from hydropower to other countries. They are also used by the electricity industry as a guarantee for electricity labelling. Since 2009, guarantees of origin have been a prerequisite for receiving subsidies as part of additional cost financing, cost-covering feed-in remuneration, and last year's federal stabilisation programme for photovoltaic plants. Swissgrid is the accredited certification body for the registration, issuing, monitoring of transfer and cancellation of guarantees of origin.

Energy certificates: long-term participation in European markets

Since October 2009, Swissgrid has been a member of the Disclosure GO Scheme run by the Association of Issuing Bodies (AIB), which represents the 16 European countries. AIB is the European leader in its field: it develops and establishes standards for international energy certificate systems. With its membership of the AIB and the introduction of the Disclosure GO service, Switzerland has secured its participation in the European energy certificate markets for the long term.

Proof of the method of production and the origin of electricity (guarantee of origin) is regulated in Ordinance 730.010.1 of the Swiss Federal Department of the Environment, Transport, Energy and Communication (DETEC), which has been in force since December 2006. Switzerland therefore has a clear legal, non-discriminatory and EU-compatible framework for issuing guarantees of origin for electricity.

Renewable energies: more green electricity for Switzerland



Financial Report 2009

Content

Financial comment

A challenging start to the first level of market liberalisation

The first year of the liberalisation brought some essential changes to the entire cash flows in the value chain in the area of the transmission systems of the Swiss electricity sector. For the first time, Swissgrid handled the ancillary services and the grid utilisation of the transmission systems centrally. The calculation of the settlement values to our customers and suppliers is sometimes complex, and based on energy data physically metered or reported, respectively. This calculation has been timely calculated – which is a big success – and this resulted in a timely processing of the cash flows in 2009.

Only limited empirical values for costs regarding the transmission systems existed for the 2009 tariff calculation so that model calculations, studies and statistics needed to be consulted. This fact, together with regulatory adjustments, partly lead to significant variances in the segments between actual expenses and income and the tariff calculation in the 2009 financial year.

General ancillary services/balance energy

For the first time in 2009, the control power reserve was centrally procured – by means of market based tenders. This expense was very high in the first half of 2009. The expense for the second half of 2009 was reduced considerably by implementing specific cost-cutting measures as well as implementing a price cap; nonetheless the expense for entire 2009 (in the amount of CHF 540.5 million) was slightly higher than initially expected by Swissgrid. The other expenses and income in the segment were as expected or more favourable.

The expenses of this segment are carried by end consumers with 0.4 ct./kWh on the one hand and by power plants with an output of more than 50 MW on the other hand, to whom the non-covered expenses are invoiced. As a result of the increased expenses, the residual costs to be invoiced to power plants amounted to CHF 346 million in 2009.

Individual ancillary services

Income in 2009 was in line with expectations. Procurement via market-based tenders and on-the-spot market was considerably more advantageous due to the following:

- The amount of active power losses to be procured was considerably lower than expected (active power losses for transmission systems had to be procured centrally for the first time in 2009 and no historical data was available for that)
- decreasing prices on the power market
- favourable development of the Euro compared to the tariff calculation

The resulting surplus in the amount of CHF 46.6 million will be included in the tariffs of the subsequent periods.

Grid utilisation

Income from tariffs is in line with expectations. ElCom as the regulatory authority enacted that an amount of CHF 30 million generated from auctions will be used to reduce the grid utilisation tariffs. The compensation for international transit flows (ITC) of CHF 65.9 million was slightly higher than calculated. In total, a surplus of CHF 9 million resulted.

Non-regulated business activities

Expenses and income of other non-regulated business activities – in particular the operating execution of the mandate of the "foundation cost-covering remuneration for feed-in to the electricity grid" (CRF) as well as leading the auction office to auction border capacities – are with an EBIT-contribution of CHF 0.7 million in line with the goals set.

EBIT, financial income and net income

The operating result in the regulated segments is based on invested operating assets (fixed assets and net current assets), for which according to Art. 13 of the Electricity Supply Ordinance a weighted average cost of capital rate (WACC) of 4.55% must be applied in 2009. Here we encountered some differing developments between the different segments: Whilst in the general ancillary services there were high increases in net current assets, the ongoing increase of the surplus in the individual ancillary services lead to negative operating assets and hence to negative costs of capital. As a result there was a partial internal financing between the segments so that the amount of interest bearing debts was lower than expected. In addition, financial expense as well was lower than expected due to a historically low interest level which resulted in a favourable net income of CHF 5.3 million.

Balance sheet and cash flow statement

After taking up its main business activities the cash flows in the value chain of Swissgrid increased tremendously which lead to a considerable extension of the balance sheet, mainly in the current assets and the current liabilities. Net current assets (excl. fiduciary assets and liabilities) increased by CHF 40 million and is the main driver of the negative cash flow.

After high investments in the previous years in order to attain the operational readiness, the focus in financial year 2009 was on starting and improving the operations so that investments in financial year 2009 would be reduced.

Outlook 2010

In 2010, the cost-cutting measures in the procurement of the control power reserve will be forcefully continued in order to achieve a decrease in this most important cost pool. The aforementioned and the existing surplus will lead to a decrease in the invested capital, which will then lead to a decrease in the costs of capital as well as a lower operating result.

Besides that, Swissgrid will very intensely prepare for the acquisition of the transmission systems in 2011/2012 which will tie up significant resources.

Luca Baroni
CFO

Income statement

million CHF	Notes	2009	2008
Regulated net turnover	1, 2	1,191.8	–
Other income	1, 3	14.4	60.5
Surplus from regulatory business	1	–55.6	–
Own work capitalised		2.2	7.1
Total operating income		1,152.8	67.6
Cost of regulated procurement	1, 2	1,051.7	–
Gross profit		101.1	67.6
Material and third-party supplies	4	22.2	11.7
Personnel expenses	5	43.2	34.4
Other operating expenses	6	10.1	10.1
Earnings before interest, tax, depreciation and amortisation		25.6	11.4
Depreciation/amortisation	9	16.3	8.2
Impairments	9	0.4	1.2
Earnings before interest and tax (EBIT)		8.9	2.0
Financial income	7	0.1	0.1
Financial expenses	8	2.4	0.4
Earnings before tax		6.6	1.7
Income tax		1.3	0.3
Net income		**5.3**	**1.4**

Balance sheet Assets

million CHF	Notes	31.12.2009	31.12.2008
Property, plant and equipment	9	17.3	11.0
Intangible assets	9	29.4	33.4
Financial assets	10	0.1	–
Fixed assets		46.8	44.4
Fiduciary assets	11	67.0	184.0
Trade accounts receivable		179.8	19.9
Other receivables	12	6.2	1.1
Prepaid expenses and accrued income	13	110.6	3.0
Cash and cash equivalents		16.8	5.9
Current assets		380.4	213.9
Total assets		**427.2**	**258.3**

Balance sheet Equity and liabilities

million CHF	Notes	31.12.2009	31.12.2008
Share capital		15.0	15.0
General reserve		0.2	0.1
Retained earnings		9.0	3.8
Total equity		24.2	18.9
Non-current financial liabilities	14	–	15.0
Non-current liabilities		–	15.0
Fiduciary liabilities	11	67.0	184.0
Current financial liabilities	15	77.0	16.2
Trade accounts payable		125.7	10.5
Other liabilities	16	3.2	5.0
Accrued expenses and deferred income	17	130.1	8.7
thereof surplus from regulatory business		55.6	–
Current liabilities		403.0	224.4
Total liabilities		403.0	239.4
Total equity and liabilities		**427.2**	**258.3**

Cash flow statement

Excluding fiduciary balance sheet items	Notes	2009	2008
Net income		5.3	1.4
Net interest expense	8	2.2	0.4
Interest income	7	–0.1	–0.1
Tax expense		1.3	0.3
Depreciation/amortisation	9	16.3	8.2
Impairments	9	0.4	1.2
Increase in trade accounts receivable		–159.9	–3.6
Increase in other receivables		–5.1	–0.8
Increase/decrease in prepaid expenses and accrued income		–107.6	0.2
Increase in trade accounts payable		114.4	5.2
Decrease/increase in other current liabilities		–1.8	2.1
Increase in accrued expenses and deferred income		119.8	0.5
Interest received		–	0.1
Taxes paid		–1.0	–
Cash flow from operating activities		–15.8	15.1
Investments in property, plant and equipment		–9.3	–7.6
Disposal of property, plant and equipment		0.1	–
Investments in intangible assets		–8.5	–18.1
Investments in financial assets		–0.1	–
Cash flow from investing activities		–17.8	–25.7
Increase in current financial liabilities		45.8	8.7
Interest paid		–1.3	–1.0
Cash flow from financing activities		44.5	7.7
Change in cash and cash equivalents		10.9	–2.9
Statement			
Cash and cash equivalents at beginning of period		5.9	8.8
Cash and cash equivalents at end of period		16.8	5.9
Change in cash and cash equivalents		**10.9**	**–2.9**

Explanations of cash flow statement
Investing activities not affecting cash:
- Invoices not received at 31 December for investments in property, plant and equipment: CHF 0.8 million (previous year CHF 0.9 million)
- Invoices not received at 31 December for investments in intangible assets: CHF 0.4 million (previous year CHF 1.8 million)
- Capitalised interest on borrowed capital: CHF 0.1 million property, plant and equipment (previous year CHF 0.1 million property, plant and equipment and CHF 0.4 million intangible assets)

Financing activities not affecting cash:
The long-term loan of CHF 15 million has been reclassified to short-term loans in 2009.

Statement of changes in shareholders' equity

million CHF	Share capital	General reserve	Retained earnings	Total share-holders' equity
Shareholders' equity 1.1.2008	15.0	–	2.5	17.5
Allocation	–	0.1	–0.1	–
Dividends paid	–	–	–	–
Net income 2008	–	–	1.4	1.4
At 31.12.2008	15.0	0.1	3.8	18.9
Allocation	–	0.1	–0.1	–
Dividends paid	–	–	–	–
Net income 2009	–	–	5.3	5.3
At 31.12.2009	**15.0**	**0.2**	**9.0**	**24.2**

The share capital consists of 15,000,000 fully paid-in registered shares with a par value of CHF 1 each.

Notes

Accounting principles

Introductory remarks

Financial statements of Swissgrid have been prepared in accordance with Swiss GAAP FER and in compliance with Swiss company law. They present a true and fair view of the net assets, financial position and results of operations of the company. These Swiss GAAP FER financial statements also correspond to the statutory financial statements provided for by the Swiss Commercial Code.

A comparison of the 2008 and 2009 financial statement figures is not meaningful as Swissgrid only began its main business activities as of 1 January 2009 and therefore, the cash flows in the value chain fundamentally changed. Certain immaterial reclassifications in the income statement of 2008 had been undertaken because of changes in the accounts structure, nonetheless there is no implication on net income.

Conversion of foreign currency positions

Accounting is in local currency (Swiss Franc, CHF). All assets and liabilities booked in foreign currencies are converted at the exchange rate as of the balance sheet date. Transactions in foreign currencies are converted at the average exchange rate of the month in which the transaction took place. Foreign exchange gains and losses resulting from transactions in foreign currencies go through the income statement and are presented in the same line item as the underlying transaction. In the 2008 financial statements foreign exchange gains and losses were still presented in the financial results whereas in the 2009 financial statements the relevant previous year figures of 2008 had been reclassified accordingly.

Cash flow statement

Fund cash is the basis for the presentation of the cash flow statement. The cash flow from operating activities is presented following the indirect method.

Revenue recognition

Revenues are income statement-related when received. In the regulated activities the measurement of the deliveries is based mainly on energy data directly metered on the transmission systems or reported from a downstream grid level respectively. For certain revenue and procurement positions the settlement values are available six weeks after delivery at the earliest. For that reason revenues for such positions have to be accrued for using historical and statistical data, as well as on the basis of estimates.

Regulated activities

Surplus and deficit: According to Art. 14 of the Federal Electricity Supply Act, costs for grid utilisation have to be allocated source-based. Tariffs for a financial year are fixed on the basis of historical costs, which means that tariffs usually are based on a cost basis that is determined two years before. Due to price and volume variances actual expense and income vary both on the revenue and on the procurement side from the tariff calculation, so that surpluses and deficits occur which means that income from tariffs of a financial year is higher or lower than the corresponding actual expense in the same period. These differences are included in the balance sheet in the accruals and deferrals, and will be accounted for in the tariff calculation that follows the current financial year.

Regulated EBIT: Earnings before interest and taxes (EBIT) from regulated activities are defined in Art. 13 of the Electricity Supply Ordinance and are in conformity with the interest of the operating assets for the transmission system operation. Therefore, the operating assets consist of net current assets and fixed assets as of the end of the financial year. For financial year 2009 the weighted average cost of capital rate (WACC) applied corresponds to the average rate of return of 10-year government bonds plus an addition of 1.93% in proportion to the risk. The weighted average cost of capital rate for financial year 2009 is 4.55%.

The allowability of Swissgrid's operating and capital costs has to be approved ex post by the Federal Electricity Commission (ElCom). A possible adjustment of the costs by ElCom would be carried out prospectively, which means that future operating income of Swissgrid would be affected.

Property, plant and equipment

Property, plant and equipment are carried at the cost of acquisition or production less cumulative depreciation and any impairment losses recognised. Depreciation is calculated using the straight-line method on the basis of the estimated useful economic lives of the assets. In the following asset categories, the economic lives are defined as follows:

- Construction in progress: only in the case of an impairment
- Plant and business equipment: 3 to 10 years
- Operational and administrative buildings (leasehold improvement): 5 to 10 years/lease term in the case of investments in real estate owned by third parties

Impairments of property, plant and equipment

The value of property, plant and equipment is assessed annually. If indications exist of a loss of value – i.e. it is unlikely that the depreciation included in the full cost can be passed on to the recipients of Swissgrid's services – the recoverable amount is calculated. If the book value is higher than the recoverable value, an impairment is recognised.

Intangible assets

Intangible assets are carried at the cost of acquisition or production less cumulative amortisation and any impairments. Amortisation is calculated using the straight-line method on the basis of the estimated useful economic lives of the assets. In the following asset categories, the economic lives are defined as follows:

- Intangible assets under development: only in the case of an impairment
- Software: 2 to 10 years
- Technical regulations: 3 to 5 years

Impairment of intangible assets

The value of intangible assets is assessed annually. If indications exist of a loss of value – i.e. it is unlikely that the amortisation included in the full cost can be passed on to the recipients of Swissgrid's services – the recoverable amount is calculated. If the book value is higher than the recoverable value, an impairment is recognised.

Construction in progress/intangible assets under development

Construction in progress and intangible assets under development are assets that are not yet completed or not yet operational. Assets are all items of property, plant and equipment and intangible assets, including own work performed by Swissgrid employees. As of each balance sheet date, an examination is carried out to determine whether existing construction in progress or intangible assets under development have no value in use. If so, these are recorded as an impairment in the year of completion. Ordinary depreciation or amortisation of these assets begins once they are completed or ready for operation.

Derivative financial instruments

Swissgrid uses derivative financial instruments to hedge foreign exchange and interest rate risks. These derivatives are recognised in the balance sheet as soon as they fulfil the definition of an asset or a liability. The valuation is at market values. Changes in value are presented in the same line item in the income statement as the underlying transaction. Fixed futures are recognised at initial recognition with their actual values. The instruments are disclosed in the notes.

Trade accounts receivable

Accounts receivable are valued at their nominal value less any impairments required for business reasons.

Cash and cash equivalents

Cash and cash equivalents includes cash in hand, cash at banks and financial investments at banks maturing in 90 days or less. They are accounted for at their nominal value.

Liabilities

Liabilities include current and non-current debts which are carried at the repayment amount.

Provision
A provision will be recognised when it represents a probable obligation that is based on a past event before the balance sheet date and its amount and/or its due date is uncertain but can be estimated. This obligation gives rise to a liability.

Contingent liabilities
Contingent liabilities are valued at the balance sheet date. If a cash outflow without any unforeseeable cash inflow is probable, a provision will be recognised.

Interest on borrowed capital
Interest on borrowed capital is recognised as an expense in the period in which it occurs. Interest on borrowed capital relating to the creation of an asset is capitalised. The capitalised interest is calculated in the period from when the asset is first created to when it is first used.

Employee pension plan
swissgrid ltd is a member of an industry-wide retirement benefit plan (PKE Pensionskasse Energie). This is a legally independent pension fund. All permanent employees of the company are included in this plan from 1 January of the year in which they turn 18. They are covered for permanent disability and death. From 1 January of the year in which they turn 25, the employees are also covered by retirement insurance.

Economic benefits from a pension fund surplus (for example, in the form of a positive impact on future cash flows) are not capitalised, since the prerequisites for this are not met and the company does not intend to use such benefits to reduce employer contributions. Any benefit arising from freely available reserves of employer contributions is recorded as an asset.

An economic obligation (for example in the form of negative effects on future cash flows due to a pension fund deficit) is recorded if the prerequisites for recognising a provision are fulfilled. The contributions for the period, the difference between the annually calculated economic benefit from pension fund surpluses and obligations, as well as the change in the employer's contribution reserve are recognised in the income statement as personnel expenses.

Transactions with related parties
Related parties are organisations and persons that can have a significant influence, either directly or indirectly, on financial or operational decisions of swissgrid ltd. Shareholders who hold at least 20% of the voting rights in swissgrid ltd, either alone or together with others, are considered to be related parties. Other criteria in addition to the proportion of voting rights are also taken into account for shareholders (e.g. representation in committees, possibility of exerting influence based on shareholder structure). Subsidiaries of related shareholders, such as shared power stations whose equity is wholly owned by related shareholders, are also considered to be related parties. Members of the Board of Directors and the Executive Board are also considered to be related parties.

Relations with related parties, if significant, are disclosed in the respective notes relating to the balance sheet and the income statement. All transactions are conducted at arm's length.

Segment information
Segment information is based on rate groups as defined in the Electricity Supply Act and is aligned to Swissgrid's internal reporting structure.

Estimation uncertainty

Swissgrid's accounting requires estimates and assumptions which may have a significant impact on the company's financial statements. Within the assets and liabilities in the balance sheet especially the accruals and deferrals, there are various estimates and assumptions which might lead to significant adjustments. The reason for that is in part due to the fact that in some revenue and procurement positions, the volumes are not available as per date of the preparation of accounts, and is also due to regulatory uncertainties.

Also see the explanations in the section on revenue recognition and regulated activities in the accounting principles on pages 66 and 67, as well as the comment in the following paragraph.

Current legal proceedings

Several appeals against the ruling of the Federal Electricity Commission (ElCom) dated 6 March 2009 regarding costs and tariffs for grid level 1 utilisation and ancillary services of 2009 are pending at the Federal Administrative Court. Swissgrid as well lodged an appeal. One significant point is regarding the tariffs for ancillary services (AS). ElCom reserved the right to examine the actual AS-costs and to decide on their allowability. According to the ruling, there is a risk that ElCom does not consider some actual AS-costs from financial year 2009 for its examination of tariffs in 2010 which means that such costs would then be borne by Swissgrid or their shareholders, respectively. Swissgrid assumes that actual AS-costs will qualify to be chargeable and therefore presented the financial statements accordingly.

1. Segment reporting

million CHF	2009	General ancillary services/balance energy	Individual ancillary services	Grid utilisation	Eliminations	Total regulation	Non regulated
Regulated net income	1,191.8	689.9	124.5	386.7	–9.3	1,191.8	–
Other income	14.4	0.7	–	0.2	–	0.9	13.5
Surplus from regulatory business	–55.6	–	–46.6	–9.0	–	–55.6	–
Total operating income	1,150.6	690.6	77.9	377.9	–9.3	1,137.1	13.5
Cost of regulated procurement	–1,051.7	–655.3	–77.3	–328.4	9.3	–1,051.7	–
Gross profit	98.9	35.3	0.6	49.5	–	85.4	13.5
Operating expenses incl. depreciation/amortisation	–90.0	–32.0	–1.0	–44.2	–	–77.2	–12.8
Earnings before interest and tax	**8.9**	**3.3**	**–0.4**	**5.3**	**–**	**8.2**	**0.7**

For segment reporting internally generated assets are deducted from operating expenses and therefore not included in total operating income.

The legal basis for the allowability of costs of capital within the regulated activities is explained in the accounting principles on pages 66 and 67. Earnings before interest and taxes (EBIT) in the regulated activities correspond to the costs of capital plus taxes on the invested operating assets per segment. The revenue and procurement positions assigned to the main segments are listed in note 2 on page 73.

General ancillary services/balance energy: The main part of this segment is the control power reserve which means the reserve of power plant capacity in order to balance energy consumption and energy injection. Expenses for control power reserve are financed on the one hand by income from tariffs and on the other hand by power plants with a minimum capacity of 50 MW.

In addition expenses and income in relation to control power reserve and balance energy that are in a mutual context are part of this segment. Also part of this segment are expenses for voltage maintenance, automatic start-up and island operation capability, and expenses and income from unintentional deviation. This segment does not show any surplus or deficit because all expenses not covered by income from tariffs are borne by power plant with a minimum capacity of 50 MW.

Individual ancillary services: This segment shows expenses and income in relation to active power losses in the transmission system. Income is mainly generated from income from tariffs and settlements from international transit flows (ITC). Procurement happens via tenders on the spot market.

In total a surplus of CHF 46.6 million resulted in the procurement in the financial year. This surplus leads to negative operating assets in this segment and therefore, to negative costs of capital (EBIT).

Grid utilisation: Expenses for the operating and capital costs of the transmission system are shown in the grid utilisation. These expenses are financed by income from tariffs, auction income from auctioning of bottleneck capacities and income from settlements from international transit flows (ITC).

Expenses for procurement in the amount of CHF 328.4 million corresponds to the settlement given to the transmission system owners for operating and capital costs of the transmission system according to the ruling from the regulatory authority. In the financial year a surplus of CHF 9 million resulted in this segment.

2. Regulated net turnover and cost of regulated procurement

million CHF	Segment	2009	2008
Income from tariff for general ancillary services (AS) and income from unintentional deviation	A	233.1	–
Charge of residual costs to plants ≥ 50 MW	A	346.0	–
Income from AS energy and from balance group/balance energy	A	110.8	–
Income from tariff for individual AS	I	102.0	–
Income from tariff for grid utilisation	N	290.8	–
Net income from ITC	I/N	88.4	–
Income from auction	N	30.0	–
Eliminations		–9.3	–
Regulated net turnover		**1,191.8**	**–**
Expenses for AS control power provision	A	540.5	–
Expenses for automatic start-up/island operation capability, voltage maintenance and unintentional deviation	A	27.5	–
Expenses for AS energy and for balance group/balance energy	A	87.3	–
Expenses for active power los	I	77.3	–
Operating expenses for transmission system	N	186.8	–
Capital expenses for transmission system	N	141.6	–
Eliminations		–9.3	–
Cost of regulated procurement		**1,051.7**	**–**

Letters used for segment allocation:
A = General ancillary services/balance energy
I = Individual ancillary services
N = Grid utilisation
Segment reporting is in note 1 on page 71.

Income from ITC consists of the following:
– Compensation for active power losses (I) CHF 22.5 million
– Compensation for grid utilisation (N) CHF 65.9 million

Compensation for grid utilisation disclosed corresponds to net income. Supervisory charges to ElCom and to the Swiss Federal Office of Energy (SFOE) in the amount of CHF 1.7 million are deducted from gross income of CHF 67.6 million.

Eliminations: Active power losses are a separate internal balance group. Therefore, internal transactions occur between the segments general ancillary services/balance energy and individual ancillary services.

3. Other income

million CHF	2009	2008
Clearing of energy act	4.8	0.6
Mandate with shareholders	–	49.3
Data management services	–	3.3
Income from schedule balance groups (SBG)	–	5.5
Auction clearing	6.3	–
Issuing guarantees of origin for renewable energies	1.1	0.5
Other	2.2	1.3
	14.4	**60.5**

Line item "other" consists of income from associated companies in the amount of CHF 0.6 million (previous year CHF 0)

4. Material and third-party supplies

million CHF	2009	2008
Expenses for projects, consulting and maintenance	17.2	7.4
Hardware/software support	5.0	4.3
	22.2	**11.7**

Material and third-party supplies contain expenses for strategic projects in the amount of CHF 7.2 million (previous year CHF 0).

Expenses for projects, consulting and maintenance contain expenses in favour of associated companies in the amount of CHF 0.8 million (previous year CHF 0).

5. Personnel expenses

million CHF	2009	2008
Salaries, bonuses, allowances	32.2	25.1
Employee insurance	5.0	4.1
Other personnel expenses	6.0	5.2
	43.2	**34.4**
Headcount at 31.12.		
Persons	256	233
Full-time equivalents	248.2	226.4

Executive board remuneration

million CHF	2009	2008
Fixed remuneration (incl. per diem expenses)	1.74	1.84
Variable remuneration	0.37	0.32
Non-cash benefits [1]	0.02	0.01
Pension benefits [2]	0.41	0.27
Total remuneration to the Executive Board	2.54	2.44
Of which to the highest earning member of the Executive Board		
Fixed remuneration (incl. per diem expenses)	0.51	0.53
Variable remuneration	0.08	0.14
Pension benefits [3]	0.07	–
Total remuneration to the highest earning member of the Executive Board	0.66	0.67

[1] Non-cash benefits include the private use of business vehicles.
[2] Pension benefits contain social security and employee benefits.
[3] The highest earning member of the Executive Board in 2008 was on a contract basis; therefore the pension benefits are already included in the remuneration in the above table.

The figures are based on the expenses included in the financial statements (accrual basis). Remuneration to ad interim Executive Board members is not included in the above table.

Other personnel expenses mainly include recruitment costs, work done by third parties (temporary staff, freelancers), expenses and training.

6. Other operating expenses

million CHF	2009	2008
Rental and ancillary costs	3.7	3.6
Rental costs for communication equipment/expenses for telecommunication	2.1	2.0
Board of Directors fees and expenses	0.9	0.7
Other	3.4	3.8
	10.1	**10.1**

Board of Directors fees and expenses represent fixed gross remuneration paid out in cash (excl. employer contributions for social insurance and VAT in cases where the payment is made to the employer). Remuneration to the Chairman of the Board of Directors in financial year 2009 is CHF 250,000, incl. reimbursement of expenses; up to December 2008 the fee was CHF 200,000 per year incl. reimbursement of expenses. The other members of the Board of Directors receive remuneration of CHF 55,000 to CHF 60,000 per year incl. reimbursement of expenses (previous year CHF 50,000).

7. Financial income

million CHF	2009	2008
Interest income from third parties	0.1	0.1
	0.1	**0.1**

8. Financial expense

million CHF	2009	2008
Interest expenses to third parties	2.3	0.9
Change in replacement costs of derivatives	0.1	–
Interest expenses to related parties	–0.1	–0.5
Other	0.1	–
	2.4	**0.4**

9. Fixed assets

Table of plant, property and equipment 2009

million CHF	Prepayments and construction in progress	Plant and business equipment	Operational and administrative buildings	Total
Acquisition cost at 1.1.2009	4.0	27.8	3.7	35.5
Additions	7.0	3.1	0.1	10.2
Disposals	–	–0.5	–0.1	–0.6
Reclassification	–2.6	2.6	–	–
Acquisition cost at 31.12.2009	8.4	33.0	3.7	45.1
Cum. depreciation at 1.1.2009	0.1	22.7	1.7	24.5
Depreciation	–	3.2	0.6	3.8
Impairments	–	–	–	–
Disposals	–	–0.5	–	–0.5
Cum. depreciation at 31.12.2009	0.1	25.4	2.3	27.8
Net book value at 1.1.2009	3.9	5.1	2.0	11.0
Net book value at 31.12.2009	**8.3**	**7.6**	**1.4**	**17.3**

Table of plant, property and equipment 2008

million CHF	Prepayments and construction in progress	Plant and business equipment	Operational and administrative buildings	Total
Acquisition cost at 1.1.2008	1.3	27.4	2.2	30.9
Additions	6.4	2.1	–	8.5
Disposals	–	–2.7	–	–2.7
Reclassification	–3.7	1.0	1.5	–1.2
Acquisition cost at 31.12.2008	4.0	27.8	3.7	35.5
Cum. depreciation at 1.1.2008	–	23.1	1.2	24.3
Depreciation	–	2.3	0.5	2.8
Impairments	0.1	–	–	0.1
Disposals	–	–2.7	–	–2.7
Cum. depreciation at 31.12.2008	0.1	22.7	1.7	24.5
Net book value at 1.1.2008	1.3	4.3	1.0	6.6
Net book value at 31.12.2008	**3.9**	**5.1**	**2.0**	**11.0**

Computer systems totalling CHF 1.2 million (previous year CHF 0.3 million) and construction work totalling CHF 0.8 million (previous year CHF 0.1 million) were purchased from related parties.

Fire insurance values amounted to CHF 56 million as at 31 December 2009 (previous year CHF 39 million).

Table of intangible assets 2009

	Software			Technical regulations		
million CHF	Purchased	Own work	Total	Purchased	Own work	Total
Acquisition cost at 1.1.2009	34.2	0.5	34.7	0.2	0.7	0.9
Additions	2.2		2.2	–	–	–
Disposals	–0.6	–	–0.6	–	–	–
Reclassification	10.1	6.4	16.5	5.5	1.6	7.1
Acquisition cost at 31.12.2009	45.9	6.9	52.8	5.7	2.3	8.0
Cum. amortisation at 1.1.2007	23.0	0.1	23.1	–	0.1	0.1
Amortisation	8.1	2.0	10.1	1.8	0.6	2.4
Impariment	–	–	–	–	–	–
Disposals	–0.6	–	–0.6	–	–	–
Cum. amortisation at 31.12.2009	30.5	2.1	32.6	1.8	0.7	2.5
Net book value at 1.1.2009	11.2	0.4	11.6	0.2	0.6	0.8
Net book value at 31.12.2009	**15.4**	**4.8**	**20.2**	**3.9**	**1.6**	**5.5**

Table of intangible assets 2008

	Software			Technical regulations		
million CHF	Purchased	Own work	Total	Purchased	Own work	Total
Acquisition cost at 1.1.2008	30.3	–	30.3	–	–	–
Additions	1.0	–	1.0	–	–	–
Disposals	–	–	–	–	–	–
Reclassification	2.9	0.5	3.4	0.2	0.7	0.9
Acquisition cost at 31.12.2008	34.2	0.5	34.7	0.2	0.7	0.9
Cum. amortisation at 1.1.2008	17.8	–	17.8	–	–	–
Amortisation	5.2	0.1	5.3	–	0.1	0.1
Impairments	–	–	–	–	–	–
Disposals	–	–	–	–	–	–
Cum. amortisation at 31.12.2008	23.0	0.1	23.1	–	0.1	0.1
Net book value on 1.1.2008	12.5	–	12.5	–	–	–
Net book value at 31.12.2008	**11.2**	**0.4**	**11.6**	**0.2**	**0.6**	**0.8**

Proposed carrying values of investment projects that were intended to be capitalised were analysed on the date of capitalisation. This led to impairments of CHF 0.4 million (previous year CHF 1.1 million).

In financial year 2009, the following work was carried out by related parties: software in the amount of CHF 0.4 million (previous year CHF 0) and none for technical regulations (previous year CHF 1.0 million).

Intangible assets under development			Total intangible assets		
Purchased	Own work	Total	Purchased	Own work	Total
14.7	7.3	22.0	49.1	8.5	57.6
5.4	1.3	6.7	7.6	1.3	8.9
–1.2	–0.2	–1.4	–1.8	–0.2	–2.0
–15.6	–8.0	–23.6	–	–	–
3.3	0.4	3.7	54.9	9.6	64.5
1.0	–	1.0	24.0	0.2	24.2
–	–	–	9.9	2.6	12.5
0.2	0.2	0.4	0.2	0.2	0.4
–1.2	–0.2	–1.4	–1.8	–0.2	–2.0
–	–	–	32.3	2.8	35.1
13.7	7.3	21.0	25.1	8.3	33.4
3.3	**0.4**	**3.7**	**22.6**	**6.8**	**29.4**

Intangible assets under development			Total intangible assets		
Purchased	Own work	Total	Purchased	Own work	Total
4.1	1.7	5.8	34.4	1.7	36.1
12.6	6.9	19.5	13.6	6.9	20.5
–	–0.1	–0.1	–	–0.1	–0.1
–2.0	–1.2	–3.2	1.1	–	1.1
14.7	7.3	22.0	49.1	8.5	57.6
–	–	–	17.8	–	17.8
–	–	–	5.2	0.2	5.4
1.0	0.1	1.1	1.0	0.1	1.1
–	–0.1	–0.1	–	–0.1	–0.1
1.0	–	1.0	24.0	– 0.2	24.2
4.1	1.7	5.8	16.6	1.7	18.3
13.7	**7.3**	**21.0**	**25.1**	**8.3**	**33.4**

10. Financial assets

Since 17 March 2009 swissgrid ltd holds the following investment:
– CESOC Ltd, Laufenburg, share capital CHF 100,000, share portion 50%

As per balance sheet date the company is valued at cost.

11. Fiduciary balance sheet items

Fiduciary assets 2009

million CHF	Auctions	ITC	SBG imbalances	Financing of additional costs	Total
Trade accounts receivable	5.9	0.3	–	0.1	6.3
Other receivables	0.4	1.4	–	–	1.8
Prepaid expenses and accrued income	–	–	–	–	–
Cash and cash equivalents	58.4	0.3	–	0.2	58.9
Total	**64.7**	**2.0**	**–**	**0.3**	**67.0**

Fiduciary liabilities 2009

million CHF	Auctions	ITC	SBG imbalances	Financing of additional costs	Total
Trade accounts payable	0.7	–	–	–	0.7
Other liabilities	4.8	0.1	–	0.3	5.2
Accrued expenses and deferred income	59.2	1.9	–	–	61.1
Total	**64.7**	**2.0**	**–**	**0.3**	**67.0**

Fiduciary assets 2008

million CHF	Auctions	ITC	SBG imbalances	Financing of additional costs	Total
Trade accounts receivable	6.8	54.5	0.3	2.5	64.1
Other receivables	0.7	1.1	–	–	1.8
Prepaid expenses and accrued income	–	28.5	0.4	0.8	29.7
Cash and cash equivalents	76.4	10.8	0.1	1.1	88.4
Total	**83.9**	**94.9**	**0.8**	**4.4**	**184.0**

Fiduciary liabilities 2008

million CHF	Auctions	ITC	SBG imbalances	Financing of additional costs	Total
Trade accounts payable	9.3	9.2	0.3	–	18.8
Other liabilities	2.7	1.0	–	4.4	8.1
Accrued expenses and deferred income	71.9	84.7	0.5	–	157.1
Total	**83.9**	**94.9**	**0.8**	**4.4**	**184.0**

Auction

Swissgrid coordinates the auctioning of bottleneck capacities for cross-border supplies and keeps the books and bank accounts as fiduciary operations. The utilization of revenue from auction is outlined in Art. 15, Para. 5 of the Electricity Supply Act. According to the ruling of ElCom dated 6 March 2009 revenue has to be utilized as follows:

million CHF	
Share of revenue Switzerland	87.7
Auction expense Swissgrid and third parties	–6.6
Net proceeds	81.1
Reduction of the allowable costs of the transmission system	–30.0
Undistributed proceeds - utilisation to be determined by ElCom	51.1

ITC and SBG

ITC (Inter-Transmission System Operator-Compensation) is part of the regulated activities of Swissgrid and is handled in Swissgrids own books. As per 1 January 2009, the position of SBG (schedule balancing group) was replaced by the balance group/balance energy and since then this belongs to the regulated activities. In the previous year Swissgrid kept these books and bank accounts as fiduciary operations. ITC positions disclosed in 2009 are undistributed remainders from 2008 which will be finally distributed in 2010.

Additional cost financing

The additional cost financing (ACF) promotes renewable energy installations commissioned prior to 1 January 2006. Since 1 January 2009, the additional cost financing is handled within the separate foundation "cost-covering remuneration for feed-in to the electricity grid" (CRF). In the

previous year Swissgrid kept these books and bank accounts as fiduciary operations. MKF positions disclosed in 2009 are undistributed remainders from 2007 which will be finally distributed in 2010.

12. Other receivables

million CHF	31.12.2009	31.12.2008
Deposits on blocked bank accounts	2.0	0.9
Fiduciary clients	4.0	–
Other	0.2	0.2
	6.2	**1.1**

13. Prepaid expenses and accrued income

million CHF	31.12.2009	31.12.2008
Deferred income	109.1	1.3
Other	1.5	1.7
	110.6	**3.0**

14. Non-current financial liabilities

million CHF	31.12.2009	31.12.2008
Bank loans	–	15.0
	–	**15.0**

15. Current financial liabilities

million CHF	31.12.2009	31.12.2008
Bank loans	77.0	13.7
Other	–	2.5
	77.0	**16.2**

swissgrid ltd has a credit line available in the amount of CHF 300 million. The framework agreement has a fixed term ending 31 December 2010 and is always prolonged for another year if not recalled.

16. Other liabilities

million CHF	31.12.2009	31.12.2008
Social security and value added tax	1.0	1.3
Deposits on blocked bank accounts	1.7	1.3
Replacement costs of derivatives	0.1	–
Pension funds	0.2	0.2
Fiduciary clients	–	2.0
Other	0.2	0.2
	3.2	**5.0**

17. Accrued expenses and deferred income

million CHF	31.12.2009	31.12.2008
Surplus from regulatory business	55.6	–
Deferred income	66.1	2.7
Personnel expenses and employees' insurance coverage	7.4	5.0
Taxes	1.0	1.0
	130.1	**8.7**

18. Derivative financial instruments

million CHF	Contract value		Receivable		Payable	
	31.12.2009	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2008
Interest swaps	139.5	–	–	–	0.1	–
Currency swaps	78.6	–	–	–	–	–
	218.1	**–**	**–**	**–**	**0.1**	**–**

Swissgrid uses futures to hedge interests on bank loans (interest rate swaps) and within current cash management (currency swaps), respectively.

19. Other, off-balance sheet liabilities

Fixed purchase and operating commitments

Under the terms of Art. 20, Para. 2a of the Electricity Supply Act, as of 1 January 2009 Swissgrid operates the Swiss extra high voltage grid. Under the terms of Art. 33, Para. 4 of the Electricity Supply Act, the transmission system must be transferred to Swissgrid by the current owners no later than 31 December 2012. Until the handover, Swissgrid must compensate the owners for their chargeable costs (Art. 15 of the Electricity Supply Act).

For 2009 owners' costs of CHF 328.4 million were determined by the ElCom ruling dated 6 March 2009. Several of those participating in the proceedings took the ruling by the regulatory authority (ElCom) to the Federal Administrative Court. For that reason, no final cost specifications can be made for 2009. Swissgrid recognized regulated procurement expenses for grid utilisation in the amount of CHF 328.4 million and expects final costs to be at the maximum CHF 89 million higher than ruled.

For 2010 the situation is similar to 2009: owners' costs of CHF 318.9 million were determined by the ElCom ruling dated 4 March 2010. Swissgrid expects final costs to be at the maximum CHF 79.6 million higher than ruled.

As well for subsequent years no exact amount of cost compensation can be determined at this time. Any possible subsequent changes in the amount of cost compensation will be taken into account in the annual tariff calculation and will be cost-effective in the subsequent billing period. Swissgrid's net income will not be affected by that.

Long-term leases

Long fixed-term leases exist with several parties. The obligations arising from these leases are shown as follows:

million CHF	Year 1	Year 2 – 7	Total
31.12.2009	2.5	7.6	10.1
31.12.2008	2.4	4.9	7.3

Off-balance sheet lease liabilities

The following off-balance sheet lease liabilities for vehicles and office equipment leases exist:

million CHF	Year 1	Year 2 – 4	Total
31.12.2009	0.2	0.3	0.5
31.12.2008	0.1	–	0.1

20. Employee pension plan

Employer's contribution reserve	Nominal value	Renounced use	Other impairments	Discount	Balance Sheet	Previous year's balance	Result from employer's contribution reserve in personnel expenses	
million CHF	31.12.2009	31.12.2009	31.12.2009	31.12.2009	31.12.2009	31.12.2008	2009	2008
Patronage fund	–	–	–	–	–	–	–	–
Pension fund (PKE)	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**

Economic benefit/ economic obligation and retirement benefit plan expenses	Over-/ underfunding	Economic share of the organisation		Change compared with previous year/ affecting income in FY	Contributions concerning the business period	Pension benefit expenses within personnel expenses	
million CHF	31.12.2009	31.12.2009	31.12.2008			2009	2008
Patronage fund	0.3	–	–	–	–	–	–
Pension fund with under-funding (PKE)	–	–		–	2.4	2.4	2.2
Total	**0.3**	**–**	**–**	**–**	**2.4**	**2.4**	**2.2**

The extrapolated funded status of the group plan pension fund (PKE) is 106.9% as at 31 December 2009. In accordance with Swiss GAAP FER 16, there is no surplus or deficit shown in the above table, as the pension fund has a so-called reserve deficit.

21. Transactions with related parties

Transactions with related parties in million CHF	2009	2008
Total operating income		
Regulated net turnover	528.7	–
therof general ancillary services/balance energy	218.6	–
therof individual ancillary services	84.4	–
therof grid utilisation	225.7	–
Non-regulated income	2.8	57.0
Operating expenses		
Cost of regulated procurement	958.5	–
therof general ancillary services/balance energy	604.8	–
therof individual ancillary services	61.9	–
therof grid utilisation	291.8	–
Material and third-party supplies	1.4	0.6
Other operating expenses	3.6	4.5
Financial result		
Financial expenses	0.8	0.1

Open balances with related parties at balance sheet date in million CHF	2009	2008
Assets		
Trade accounts receivable	95.1	19.3
Other receivables	0.2	–
Prepaid expenses and accrued income	19.0	1.7
Liabilities		
Current financial liabilities	–	2.5
Trade accounts payable	108.5	6.3
Other liabilities	0.2	0.4
Accrued expenses and deferred income	18.1	0.3

Related party relationships are defined in the accounting principles on pages 69 and 70.

22. Risk assessment

Through a multi-level process, we identify company-wide risks, changes to risks currently being monitored and re-evaluated, and examine the results of previous measures. On this basis, the current risks are evaluated according to their probability and impact. Those risks that are assessed as significant are avoided, reduced or mitigated through corresponding measures determined by the Board of Directors.

23. Events after the balance sheet date

The following events occurred after the balance sheet date of 31 December 2009:

On 4 March 2010, the regulatory authority (ElCom) issued a ruling governing costs and tariffs for grid level 1 utilisation and ancillary services. Therefore, the budgeted tariff calculation for 2010 approved by the Board of Directors has been reduced to the amounts of 2009. As such, it is not yet clear whether the additional operating costs of 2010 will be allowable when they are being reviewed ex post. A denial or just partial approval of the allowability could jeopardize Swissgrid's liquidity and financial stability. For that reason, and in order to bring the issue to resolution quickly, Swissgrid has initiated discussions with ElCom.

Swissgrid lodged an appeal against the ruling of ElCom with the Federal Administrative Court.

Events after the balance sheet date have been taken into account up to 30 March 2010.

Proposed appropriation of retained earnings

The Board of Directors proposes to the Annual General Meeting that the retained earnings for 2009 be appropriated as follows:

CHF	2009	2008
Amount carried forward from the previous year	3,703,761.35	2,402,636.46
Net profit for the year	5,283,160.99	1,370,124.89
Retained earnings	8,986,922.34	3,772,761.35
Allocation to the General Reserve	265,000.00	69,000.00
Dividend payment	682,500.00	–
To be carried forward	8,039,422.34	3,703,761.35
Total appropriation	**8,986,922.34**	**3,772,761.35**

The dividend of 4.55% corresponds to the costs of capital for the invested operating assets for 2009, as defined in the Electricity Supply Ordinance.

On behalf of the Board of Directors
Chairman:

Peter Grüschow

Report of the Statutory Auditor

Report of the Statutory Auditor on the Financial Statements to the General Meeting of

swissgrid ltd, Laufenburg

As statutory auditor, we have audited the financial statements of swissgrid ltd, which comprise the income statement, balance sheet, statement of cash flows, statement of changes in shareholders' equity and notes as presented on pages 62 to 87 for the year ended 31 December 2009.

Board of Directors' Responsibility

The board of directors is responsible for the preparation of the financial statements in accordance with Swiss GAAP FER, the requirements of Swiss law and the company's articles of incorporation. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The board of directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements for the year ended 31 December 2009 give a true and fair view of the financial position, the results of operations and the cash flows in accordance with Swiss GAAP FER and comply with Swiss law and the company's articles of incorporation.

Report on Other Legal Requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the board of directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG AG

Orlando Lanfranchi
Licensed Audit Expert
Auditor in Charge

Roman Martin
Licensed Audit Expert

Basle, 30 March 2010

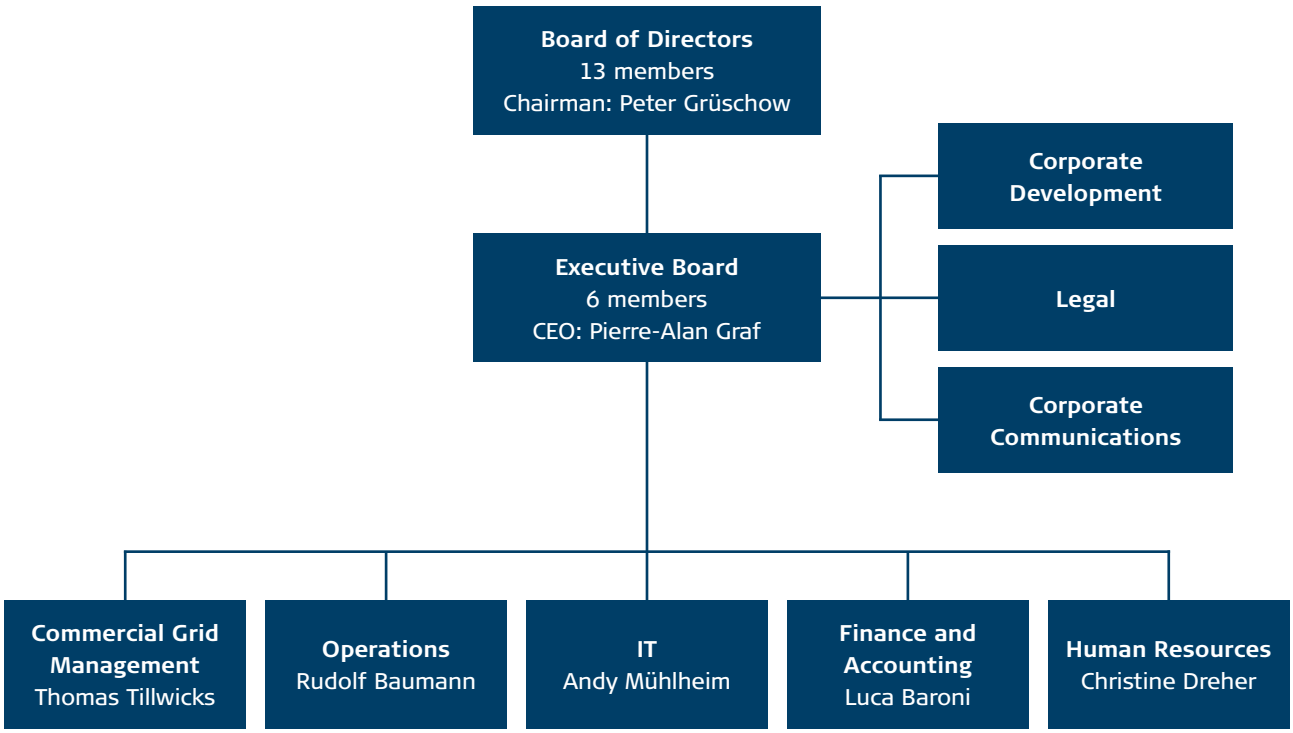
Corporate Governance

The Board of Directors and the Executive Board of Swissgrid place great importance on good corporate governance. The following lists are based on the Swiss Code of Best Practice for Corporate Governance. All information relates to 31 December 2009, unless specified otherwise.

1 Group structure and shareholders

1.1 Group structure

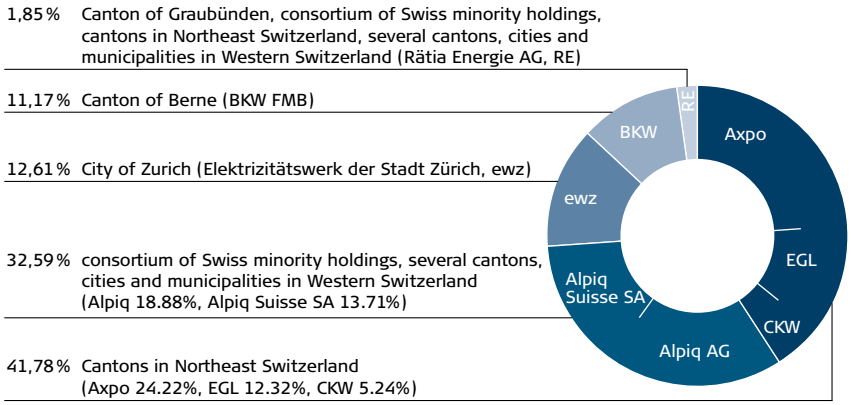
The operational structure of swissgrid ltd is shown below:



Swissgrid ltd has the following shareholding: CESOC AG in Laufenburg, share capital CHF 100,000, equity stake 50%

1.2 Shareholders

Swissgrid is wholly owned by the Swiss electricity companies Alpiq AG, Alpiq Suisse AG, Axpo AG (Axpo), BKW FMB Energie AG, Centralschweizerische Kraftwerke AG, Elektrizitäts-Gesellschaft Laufenburg AG, Elektrizitätswerk der Stadt Zürich (ewz) and Rätia Energie AG (RE). The companies are directly or indirectly majority-owned by the cantons and the municipalities.



1.3 Cross shareholdings

There are no cross shareholdings

2 Capital structure

2.1 Capital and restriction on transferability

The company's share capital amounts to CHF 15,000,000.00 (fifteen million Swiss francs) and is divided into 15,000,000 (fifteen million) registered shares with a nominal value of CHF 1.00 (one Swiss franc). The shares are fully paid-up. There is no authorised or conditional capital. According to Art. 18 Para. 5 of the Electricity Supply Act, the company's shares may not be listed on an exchange. The Board of Directors keeps a share register listing the names and addresses of the owners and beneficiaries. Only those who are entered in the share register may exercise shareholder rights as a shareholder or beneficiary in relation to the company. The status of the entries in the share register on the 20th day prior to the Annual General Meeting is decisive for determining entitlement to participation and representation at the Annual General Meeting. The majority of the share capital and the associated voting rights must belong directly or indirectly to the cantons and municipalities in accordance with Art. 18 Para. 3 of the Electricity Supply Act. In the event of share transfers (sale, gift, exercise of pre-emption rights and purchase rights, etc.), these majorities must be retained. If a planned transaction infringes upon one of these majority requirements, the approval of the Board of Directors must be denied.

There are no participation certificates, and the company has no convertible bonds outstanding and no options were issued.

2.2 Capital changes

More information on the share capital and capital changes in the last three years is given in the Statement of changes in shareholders' equity on page 65.

First row, f.l.t.r.: Thomas Burgener, Conrad Ammann, Doris Russi Schurter, Peter Grüschow, Conrad Wyder, Otto E. Nägeli
Second row, f.l.t.r.: Kurt Rohrbach, Adrian Bult, Michael Wider, Andrew Walo, Fadri Ramming, Herbert Niklaus, Heinz Karrer

3 Board of Directors

3.1 Members of the Board of Directors, additional activities and affiliations

Name, nationality, function, education	Date of election to the Board of Directors	Professional experience, career	Additional activities and affiliations	Member of committees
Peter Grüschow (1944, CH) Chairman, independent member Dipl. Ing.	4 December 2008	Member of the Executive Board of Siemens Switzerland (1991 to 2005), CEO since 1996, member of various boards, including Swissmem, economiesuisse and the Swiss-German Chamber of Commerce	Chairman of the Board of Trustees of Swisscontact, Chairman of the Board of Directors of Albis Technologies AG, Chairman of CRF Foundation	Chairman of the Strategy Committee
Conrad Wyder (1957, CH) Vice-Chairman, independent member MBA	14 December 2006	Director of IBM Switzerland Ltd (since 1998); previously in management position at Hewlett-Packard	Board of Directors of H.K. Schibli AG and Robert Fuchs AG	Member of the Staff and Compensation Committee
Dr. Conrad Ammann (1959, CH) Board of Directors, industry representative Dr. sc. techn., dipl. El. Ing. ETH	14 December 2006	Director of Elektrizitätswerk der Stadt Zürich (ewz); previously member of the Executive Board of Elektra Birseck Münchenstein AG (EBM)	Member of the Boards of Directors of hydro power plants (Blenio Kraftwerke, Maggia Kraftwerke, Kraftwerke Oberhasli) and nuclear power plants (Kernkraftwerk Gösgen, AKEB Aktiengesellschaft für Kernenergiebeteiligungen) and Swisspower AG	Member of the Finance and Audit Committee
Adrian Bult (1959, CH) Board of Directors, independent member lic. oec.	14 December 2006	COO of Avaloq Evolution AG (since 2007); previously CEO of Swisscom Mobile Ltd and CEO of Swisscom Fixnet Ltd as well as member of the Executive Board of IBM Switzerland	Member of the Board of Directors of Swissquote Holding AG and Versatel Holding GmbH, Board of Directors of Gesellschaft für Marketing	Member of the Strategy Committee

Thomas Burgener (1954, CH) Board of Directors, cantonal representative lic. iur.	14 December 2006	Office for Political and Legal Counselling (since May 2009); previously State Councillor, Canton of Valais, National Councillor, independent lawyer and notary	Committee member, Board of the Alpine Initiative	Chairman of the Staff and Compensation Committee
Heinz Karrer (1959, CH) Board of Directors, industry representative Dipl. Kaufmann	14 December 2006	CEO of Axpo Holding AG since 2002; prior to that, member of the Group Executive Board of Swisscom Ltd, member of the Group Executive Board of Ringier AG and CEO of Intersport Holding AG	Member of various Boards of Directors of Axpo Group companies and Kuoni Reisen Holding AG; member of the Board of Swisselectric and economiesuisse	Member of the Staff and Compensation Committee
Otto E. Nägeli (1949, CH) Board of Directors, independent member Dipl. Bankfachmann	11 December 2007	Partner in OEN Consulting Nägeli & Partner (since 2003); previously on the Executive Board of Privatbank Rüd, Blass & Cie., Eurex AG and Soffex AG	Non-executive Chairman of the Board of Directors of CME Clearing Europe Ltd., London	Member of the Finance and Audit Committee
Herbert Niklaus (1955, CH) Board of Directors, industry representative Dipl. El. Ing. ETH	14 December 2006	Head of the Energy Service division of Alpiq Holding AG, member of the Executive Board (since 2005); previously in a management role at Atel Netz AG, Zellweger Uster AG, Enermet AG and the Oerlikon Bührle Group	None	Member of the Finance and Audit Committee
Fadri Ramming (1962, CH) Board of Directors, cantonal representative lic. iur., lawyer and notary	14 December 2006	Lawyer and notary at own law firm, managing director of the Conference of Energy Directors EnDK (partial mandate since 1997)	Member of the Swiss delegation for a Swiss-EU agreement on electricity (cantonal representative); member of the Energy Commission of the Principality of Liechtenstein	Member of the Strategy Committee
Kurt Rohrbach (1955, CH) Board of Directors, industry representative Dipl. El. Ing. ETH	14 December 2006	Chairman of the Management Board of BKW FMB Energie AG, member of the Management Board since 1992	Chairman of the Association of Swiss Electricity Companies	Member of the Staff and Compensation Committee
Doris Russi Schurter (1956, CH) Board of Directors, independent member lic. Iur., lawyer	11 December 2007	Lawyer in own practice, Burger & Müller (since 2005); previously partner and branch manager at KPMG	Member of the Board of Directors of Helvetia Holding AG, Patria Genossenschaft, LZ Medien Holding AG as well as various smaller companies; Managing Director of the Art Mentor Foundation in Lucerne, alongside various foundation board mandates; chairman of the arbitration committee of the Central Switzerland Chamber of Commerce	Chairman of the Finance and Audit Committee
Dr. Andrew Walo (1963, CH und GB) Board of Directors, industry representative Dr. oec. publ.	14 December 2006	CEO of CKW and member of the Group Executive Board of Axpo Holding AG since 2004; previously Managing Director of SN Energie AG and Kraftwerke Zervreila AG, as well as managerial positions at Alstom and ABB	Member of various Boards of Directors of Axpo Group companies as well as Resun AG; on the board of Swisselectric, the Association of Swiss Electricty Companies (VSE) and the Lucerne Industry Association (LIV)	Member of the Strategy Committee
Michael Wider (1961, CH) Board of Directors, industry representative lic. iur., MBA	30 June 2009	Head of SwissEnergy, Deputy CEO of Alpiq Holding AG (since 2009); previously in various functions on the Executive Board of the Alpiq Group	Chairman or member of the Board of Directors of various electricity companies	Member of the Strategy Committee

Departures in the reporting period:

Hans E. Schweickardt, Vice Chairman (EOS), as of 30 June 2009

3.2 Election and term of office

The Board of Directors comprises at least three elected members. The majority of the members and the Chairman must meet independence requirements in accordance with Art. 18 Para. 7 of the Electricity Supply Act. The Board of Directors is elected as a rule at the Annual General Meeting for one year at a time. The term of office for members of the Board of Directors ends on the day of the next Annual General Meeting. All cantons together have the right to delegate and recall two members to/from the Board of Directors of the company (Art. 18 Para. 8 of the Electricity Supply Act). The members of the Board of Directors can be re-elected at any time. The Board of Directors is self-constituting. It nominates its Chairman and Vice-Chairman and the Secretary, who does not have to be a member of the Board of Directors.

3.3 Internal organisation

The Board of Directors is responsible for the overall management of the company and for supervising the Executive Board. It represents the company externally and takes care of all matters that are not assigned to another corporate body according to law, regulations or the Articles of Association. The Board of Directors can, subject to the legal guidelines on independence (Art. 18 Para. 7 of the Energy Supply Act), transfer the management of the company or individual parts thereof as well as the representation of the company to one or more persons, members of the Board of Directors or third parties, who do not have to be shareholders. It issues the organisational regulations and the corresponding contractual relationships. The powers of the Board of Directors and the Executive Board are defined in the organisational regulations. The members do not exercise any executive roles within Swissgrid. The Board of Directors met six times in the last financial year and held seven teleconferences. The Board of Directors also held a two-day strategy event.

3.4 Board committees

In order to incorporate the specialist knowledge and broad range of experience of the individual members into the decision-making process, or to report as part of its supervisory duty, the Board of Directors formed three committees from among its members to assist in management and control activities in close collaboration with the Executive Board: the Strategy Committee, the Finance and Audit Committee and the Staff and Compensation Committee. The tasks and powers of the Board committees are set out in the organisational regulations.

Strategy Committee

The Strategy Committee supports the Board of Directors in the strategy process. It advises on the strategic principles on behalf of the Board of Directors and reviews the strategy for the Board of Directors on a regular basis. The committee presents its view on proposals that relate to strategic issues. The Strategy Committee met five times during the last financial year.

Finance and Audit Committee

The Finance and Audit Committee supports the Board of Directors in its supervisory role, namely with regard to the integrity of the accounts, the fulfilment of legal provisions, and the competence and services of the external auditors. The Finance and Audit Committee assesses the suitability of financial reporting, the internal control system and the general monitoring of business risks. It ensures that there is ongoing communication with the external auditors concerning the financial situation and course of business. It makes the necessary preparations relating to the appointment or discharge of the auditors. The Finance and Audit Committee met three times during the last financial year.

Staff and Compensation Committee

The Staff and Compensation Committee draws up policies for the compensation (incorporating all compensation components) of the members of the Board of Directors, the CEO and the division heads and submits a proposal to the Board of Directors. The committee defines the compensation for the CEO and the members of the Executive Board as part of the policies approved by the Board of Directors in accordance with the compensation concept. It presents its view on candidates to be nominated in accordance with the CEO's proposal. It also ensures that succession planning is in place for the Board of Directors and the Executive Board. The Staff and Compensation Committee met five times in the last financial year and held one teleconference.

3.5 Information and control instruments with regard to the Executive Board

Information and control instruments

The Board of Directors has the following instruments for monitoring and supervising the Executive Board:

- The report to the Board of Directors (BoD reporting) contains key figures on business performance, with comments from the Executive Board. The BoD report is drawn up on a quarterly basis and issued in writing to all members of the Board of Directors.
- At Board meetings, the Executive Board presents and comments on business performance and submits all important issues.
- The external auditors issue an annual written report for the Board of Directors (see also the lists in section 7.2 on page 99).

Internal control system

The internal control system (ICS) has an important role as part of corporate management and monitoring, and covers all procedures, methods and measures mandated by the Board of Directors and the Executive Board that serve to ensure that Swissgrid operates in the correct way. The organisational measures for internal control are integrated in the operating procedures, which means that they are implemented while work is being carried out or immediately before or after. Internal checks do not come under a separate ICS function, but are integrated in the processes. The ICS at Swissgrid, which focuses consistently on key risks and checks, is implemented at all levels of the organisation and demands a high level of personal responsibility from employees.

Risk management

The company-wide risks of Swissgrid are identified, changes to risks currently being monitored are re-evaluated and the results of previous measures are determined as part of a periodic, multi-level process. On this basis, the current risks are evaluated according to their probability of occurrence and impact. Those risks that are assessed as significant are avoided, reduced or hedged through corresponding measures determined by the Board of Directors.

F.l.t.r.: Luca Baroni, Rudolf Baumann, Pierre-Alain Graf, Christine Dreher, Thomas Tillwicks, Andy Mühlheim

4 Executive Board

4.1 Members of the Executive Board, additional activities and affiliations

Name, nationality, function, education	Member of the EB since	Professional experience, career	Additional activities and affilations
Pierre-Alain Graf (1962, CH) CEO lic. iur, lic. oec. HSG	1 February 2009	General Manager of Cisco Systems Switzerland Ltd (2006 to 2008); previously at Colt Telecom Group Ltd.	Board of Directors of Cesoc AG
Luca Baroni (1971, CH und I) Finance and Accounting Certified Economist	15 December 2006	CFO of Etrans AG (2005 to 2006); previously CFO of Energiedienst Holding AG and at EGL AG, WATT AG and at Migros Genossenschaftsbund	None
Rudolf Baumann (1948, CH) Operations Dipl. El. Ing. HTL	15 December 2006	Etrans AG (2000 to 2006), most recently Head of Operations; previously Head of IT at EGL AG	Active on international committees in the European Association of Transmission System Operators ENTSO-E, Chairman of TSO Security Cooperation (TSC), Board of Directors of Cesoc AG
Andy Mühlheim (1968, CH) IT Engineer HTL, Industrial Engineer STV/FH	1 March 2009	IT Director at Alstom Switzerland Ltd (2004 to 2009); previously at Swisscom Ltd, Sunrise AG and Siemens Switzerland Ltd	None
Thomas Tillwicks (1952, CH/D) Commercial Grid Management Graduate in Electrical Engineering	15 December 2006	Head of Commerical Grid Operation at Etrans AG (2005 to 2006); previously at Atel AG and in electricity supply in Berlin	Active on international committees in the European Association of Transmission System Operators ENTSO-E
Christine Dreher (1963, CH) Human Resources Graduate in HR Management	1 September 2009	Human Resources Director at CSC Schweiz GmbH (2004 to 2008); prior to that at Sunrise AG and Jelmoli AG	None

5 Remuneration

The members of the Board of Directors receive a fixed remuneration (fees and expenses) which is on a sliding scale for the Chairman and the other Board members. Remuneration for the members of the Executive Board consists of a basic salary (incl. per diem expenses) and a variable salary component which is dependent on achieving company and personal targets. The amount of remuneration for members of the Executive Board is defined by the Staff and Compensation Committee. Payments to the Board of Directors and the Executive Board are disclosed on pages 75 and 76 of the Notes to the Financial Statements.

6 Rights of participation

Shareholders' rights to assets and rights of participation are governed by law and the Articles of Association. There are no statutory regulations that differ from the legislation.

7 External audit

7.1 Mandate and fees

KPMG AG, Basel, are the legally appointed auditors for swissgrid ltd. The audit mandate was first awarded to KPMG for the 2005/2006 financial year (long year). The auditor in charge, Orlando Lanfranchi, has been in the role since the 2005/06 financial year. The auditors are appointed at the Annual General Meeting for a one-year term. For its function as auditors, KPMG received remuneration of CHF 149,000 for the last financial year; additional support services in the areas of internal checks and taxation were remunerated to the amount of CHF 315,000.

7.2 Information instruments

Every year the Finance and Audit Committee evaluates the effectiveness of the external audit. The members of the committee use their knowledge and experience gained from holding similar positions in other companies to evaluate the audit. They also base their evaluation on the documents provided by the external auditors, such as the comprehensive report and the oral and written statements on individual aspects in connection with accounting, the internal control system and the audit.

Publishing and contact details

The Annual Report is published in English, German, French and Italian.

Further information on Swissgrid is available at www.swissgrid.ch.

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This version was printed on FSC-certified paper. FSC stands for Forest Stewardship Council. The main aim of this organisation is to promote responsible forest management – forests should be managed in a sustainable way so that they can be enjoyed by future generations in the same way as they are today. The German version of the Annual Report is binding.

swissgrid

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