swissgrid

Annual Report 2012

We transport electricity.

Essential for Switzerland.

Indispensable for Europe.

A driving force that provides

quality of life for millions

of people. Today and tomorrow.

Contents

At a glance

Swissgrid – the national grid company

Swissgrid is the national grid company. As the owner of the Swiss high-voltage grid, it is responsible for reliably and productively operating the grid without discrimination, and for maintaining, modernising and expanding the grid safely, efficiently and with respect for the environment. Swissgrid employs over 380 highly skilled people from sixteen countries. As a member of the European Network of Transmission System Operators for Electricity (ENTSO-E), it is also responsible for grid planning, system management and market design in the cross-border exchange of electricity in Europe. Swissgrid is owned by 17 Swiss electricity companies.

Figures for the Swiss transmission system in 2012

Energy transported (in GWh)	79,072
Import (in GWh)	30,988
Export (in GWh)	31,841
Grid length (in km)	6,700
Substations	130
Number of grid transfers to other countries	40

Financial information (in millions of CHF)

Operating activities	770.8
Cost of procurement	620.2
Operating expenses incl. depreciation and impairment losses	137.3
Earnings before interest and income taxes (EBIT)	13.3
Net income	9.8
Balance sheet total	450.8
Free cashflow	60.4

Pierre-Alain Graf
CEO (left)

Adrian Bult
Chairman of the Board of Directors

A powerful grid for the future

Dear reader

Swissgrid reached an important milestone in the history of Swiss electricity in January 2013 with the successful takeover of the Swiss transmission system. As the new owner, Swissgrid will no longer just be responsible for operating the grid, but also for its maintenance, modernisation and expansion. The complex project started in 2009. The objective was to transfer 6,700 kilometres of grid, 15,000 electricity pylons and 130 switching substations from over 30 owners in Switzerland to a national grid company. The major challenge was preparing individual solutions for the operational transfer of the grid for every owner. The unique project placed high demands on all the stakeholders for over three years and was only successfully completed thanks to the close and constructive cooperation of all the parties involved. The on-time conclusion of the project completes the horizontal unbundling of the Swiss electricity market. This not only fulfils a provision of the Electricity Supply Act, but has also formed an important basis for the future development of Swissgrid as a grid company.

Necessary steps for a secure electricity supply

The Swiss transmission system must be upgraded and expanded in order to fulfil future electricity supply requirements. The objective is to implement eight grid expansion programs in the next ten years. This is an ambitious but important project for a secure electricity supply. To achieve this objective, it is crucial that approval processes be quickly streamlined. As part of the consultations on new electricity grid strategies, Swissgrid submitted specific proposals for the adaptation of the legal framework. For example, the number of appellate courts and the objection periods should be reduced to simplify and streamline the processes. A strong political will is required for the rapid adaptation of the legal framework. The rapid closure of the gaps in the Swiss transmission system and the long-term security of the electricity supply can only be ensured with a new framework for the expansion of the grid.

Support for the renovation of the electricity system

The implementation of the 2050 energy strategy is also a huge challenge. It has a direct impact on the transmission system and requires considerable investment in the national grid infrastructure. Swissgrid is considering various energy and technology scenarios for planning the Swiss transmission system after 2035 and coordinates these scenarios with the domestic power plant and grid operators and the transmission system operators in Europe.

The developments show that more and more electricity is generated from renewable energies. However, this type of electricity production is heavily dependent on the current availability of natural resources and is extremely volatile. This is a huge challenge for the electricity grid. The solution lies in making the grid “intelligent” and developing it into a so-called Smart Grid. Consumers and producers will be connected and managed using modern communication technologies. To gain experience in this promising field, Swissgrid, together with Migros, BKW and IBM, has been committed to a Smart Grid pilot project since 2012. Migros cold storage warehouses are operated in a flexible manner so that they can help to stabilise the electricity grid. The project will continue until the end of 2013 and is expected to generate important findings for the efficient management of consumption and production and the stabilisation of the electricity grid.

Strengthening Switzerland's position in Europe

For decades, Switzerland has been an important hub for electricity in Europe. With the grid takeover, Swissgrid has achieved the EU conformity which was vital for Switzerland and which strengthens its position in the European arena. It is in the interests of our country

to ensure that electricity can flow into and through it, as well as Europe as a whole, unimpeded. Swissgrid is working closely with European transmission system operators and provides valuable contributions in European committees and research consortia. In the European Network of Transmission System Operators for Electricity (ENTSO-E), Swissgrid is committed to shaping the rules for electricity transportation (network codes) as well as for the operational planning of the flow of European electricity in the next ten years. Swissgrid also uses its know-how to support the research consortium for developing a pan-European transmission system (supergrid).

To optimise the flow of electricity into and out of our country, Swissgrid, together with neighbouring transmission system operators, substantially developed cross-border grid activities in 2012. Thanks to the expanded trading options, in the future electricity traders will be able to purchase electricity transport capacities at auction even more flexibly. This will increase the liquidity of the electricity market and lay the foundations for the integration of renewable energies into the grid.

Secure and stable grid operation despite bottlenecks

In the past financial year, Swissgrid managed to operate the transmission system safely and without interruption despite extremely volatile flows of electricity. While the volume of energy transported fell by about 2%, the situation in the Swiss transmission system remained under pressure at certain points. In particular, bottlenecks regularly occurred on cold winter nights and hot summer days. As a result, for reasons of grid security, Swissgrid has to repeatedly restrict the production of hydroelectric power in the Alps and the international exchange of energy. The bottlenecks in the grid must be removed as quickly as possible so that Swissgrid can continue to ensure a secure supply of electricity.

As per previous years, Swissgrid was able to reduce the volume of energy required for the Swiss control area. The costs of control power provision amounted to 164 million francs, which corresponds to a 12% reduction over the previous year. A key contributor to this was Swissgrid's participation in the German Grid Control Cooperation since March 2012 and new bilateral agreements with the transmission system operators in the surrounding countries. Overall, these developments had a positive impact on the total costs of the transmission system and on end consumer prices.

Swissgrid is responsible for the secure, reliable and cost-effective operation of the Swiss transmission system. As the operator of national infrastructure, Swissgrid plays a vital role in the domestic supply of electricity. To ensure that Swissgrid remains informed of the security, availability and condition of the equipment, data regarding the condition of the Swiss transmission system has been constantly recorded, processed and published since 2012. This ensures that the security of electricity supply is both measurable and transparent. It also provides important information on where the grid operation can be optimised and designed more efficiently.

Outlook

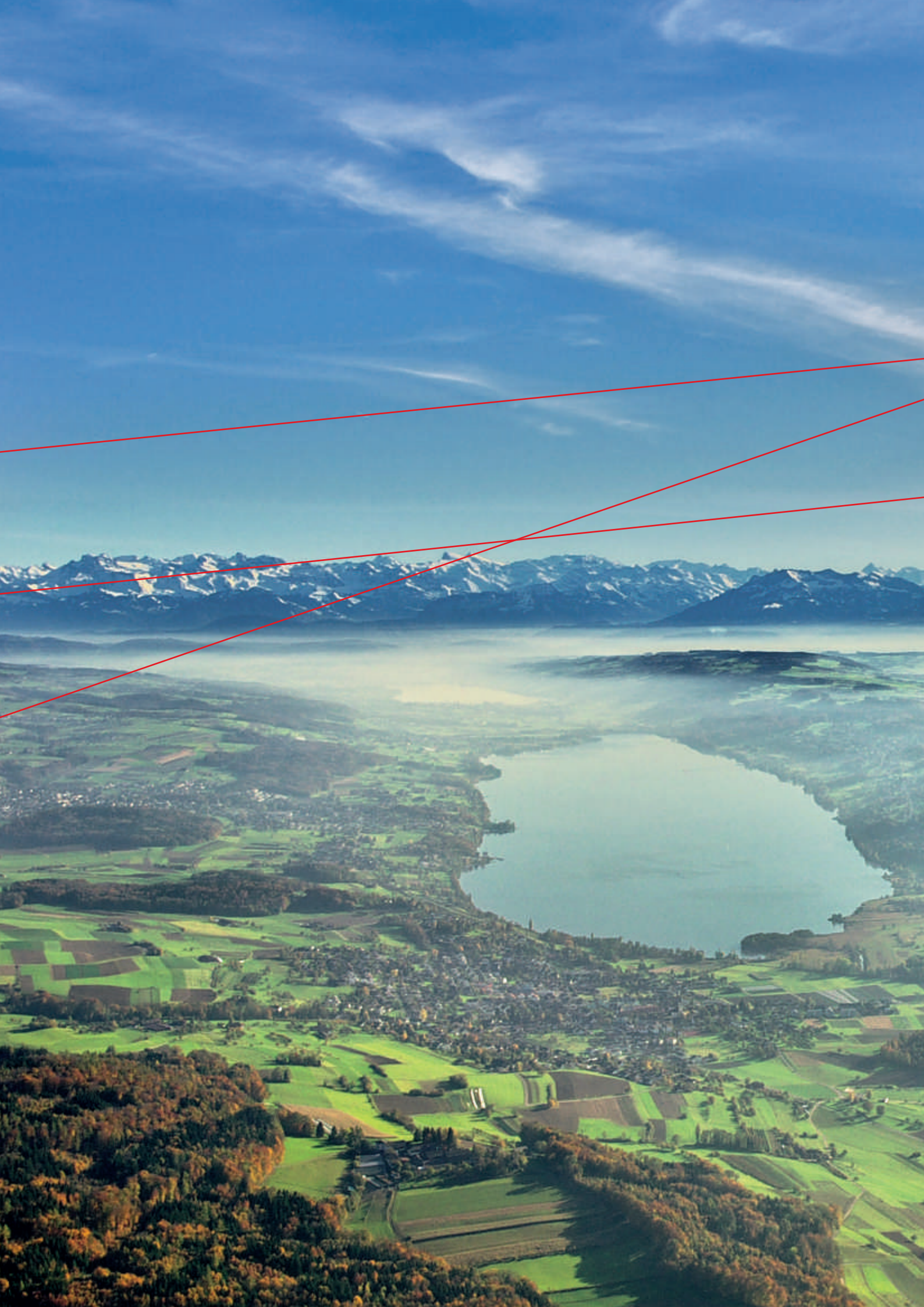
With the overall responsibility for the Swiss transmission system, Swissgrid is faced with many new challenges. Our activities are focused on the secure and efficient operation of the grid, rapid modernisation, the expansion of the grid infrastructure and helping to design our country's electricity system. Our motto is: “A strong grid for the future”.

With the completion of the network takeover and the start of a new Swissgrid era, Peter Grüschow has stepped down as Chairman of the Board of Directors. Under his leadership, Swissgrid has been able to establish itself as a competent grid company in both Switzerland and Europe over the last four years. Other Board of Directors members who have also stepped down are: Patrick Mariller, Otto E. Nägeli, Dieter Reichelt, Kurt Rohrbach and Conrad Wyder. The Board of Directors would like to express its sincere thanks and appreciation to all Board members for their efforts.

The operating environment remains exciting and the energy reform is a huge challenge. Working with a team with a great deal of dedication, drive and enthusiasm, we will continue to close in on our vision of a “Top-5-TSO” in Europe. On behalf of the Board of Directors and Executive Board, we would like to express our warmest thanks to all those employees and partners who are helping us achieve this long-term goal!

Adrian Bult
Chairman of the Board of Directors

Pierre-Alain Graf
CEO



2012 in review

2012 in review

Secure system operation without interruption

The situation in the Swiss transmission system in 2012 was again characterised by volatile flows of electricity and dynamic production patterns. Despite this pressure, there were no events that led to an incident in the Swiss electricity supply. Neither the period of cold weather in February 2012, nor the disturbances on the 220 kV line from the Bernese Oberland to Valais and the cross-border 380 kV Alp line over the Forclazpass in the summer of 2012 led to precarious grid situations for Switzerland. It was possible to implement the necessary operating measures in good time.

In order to keep the grid stable, on various occasions, Swissgrid supported foreign transmission system operators with emergency reserves. Yet improved coordination with the distribution grid and power plant operators also led to occasional pressure relief in the grid. In particular, the situation in the typical Leman/Valais congestion region was able to be improved through operational optimisations.

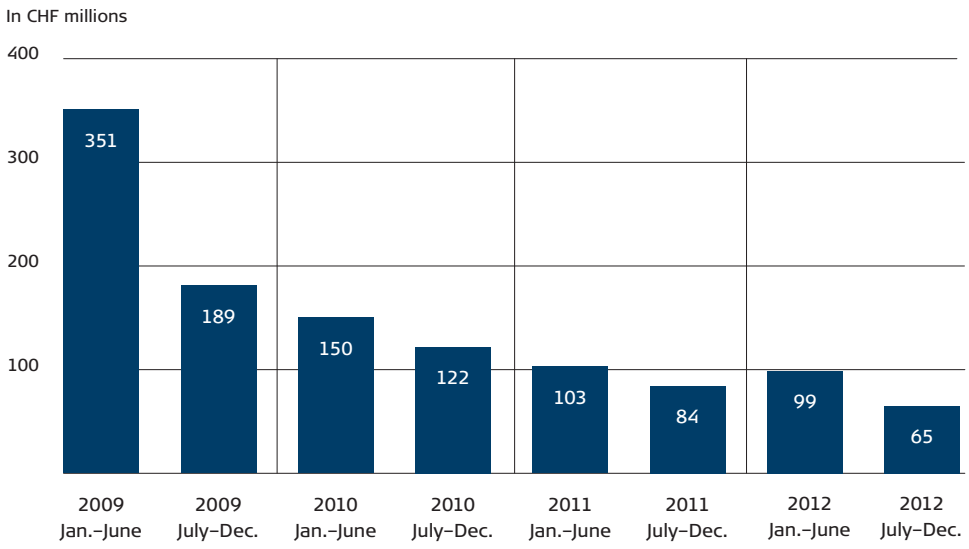
In the past, Swissgrid frequently had to reduce electricity production from hydropower due to a lack of grid capacity. To prevent such situations in the future, in the summer of 2012 the grid was operated depending on the temperature for the very first time. This method makes optimal use of the physical performance of the grid, resulting in higher grid capacity. Together with the better coordination, the temperature-based grid management proved to be effective. However, this does not remove the structural bottlenecks in the Swiss transmission system.

« In order to keep the grid stable, on various occasions, Swissgrid supported foreign transmission system operators with emergency reserves. »

Lower costs for control energy

The costs of procuring ancillary services were again reduced in 2012. Annual expenses amounted to about 164 million francs, a reduction of 12% from the previous year. Overall, the positive development is attributable to two measures: from May 2012, Swissgrid was able to reduce the required amounts of tertiary control power without impacting the reliability of supply and

Development of ancillary services procurement costs



the high Swiss control quality. A new method for forecasting the demand for control energy allowed imbalances in the grid to be forecast much more precisely. The admission of the Swiss control area to the German Grid Control Cooperation also reduced costs. This Grid Control Cooperation links the power inequalities of various countries. This means that imbalances in the control areas are balanced before deploying the control power in order to keep the required volume of control energy as low as possible. This "solidarity" will prevent the mutual deployment of control power wherever possible.

GO! project: seamless transition of grid activities

The extremely complex transfer process for the Swiss transmission system was successfully completed on-time in 2012, thanks to the constructive and targeted collaboration between the former owners and Swissgrid. Besides the legal and financial transition, on the operational side, it also had to be ensured that Swissgrid was well prepared for new activities. This includes the planning and performance of maintenance activities, the management of disturbances and administrative processes, such as the preparation and payment of invoices. All of these activities had to be maintained without interruption during the transformation phase. Swissgrid and all the parties involved in the grid transfer process proved more than equal to the challenge. The electricity supply was maintained at a high level at all times, without the electricity consumer noticing any of the intense work being carried out in the background.

The activities commenced in 2011 with regard to the nationwide management of the grid elements by Swissgrid were continued. The operators have been performing the switching operations for all Alpiq substations from the Swissgrid Control grid control room in Laufenburg since November 2012. In the future, this will be the case for a total of 26 switching substations throughout Switzerland. Swissgrid Control employees all completed an intense training programme for this important task. In particular, the focus was on system knowledge and the conditions on site. Every substation has different framework conditions that must be considered during everyday grid operation. The employee training was successfully completed in mid-2012 with a certification.

Swissgrid supports the Federal Government's energy strategy

The work to implement the Federal Government's energy strategy was continued in 2012. The focus was particularly on the analysis of possible developments in the flow of electricity and the electricity markets by 2035. Various scenarios were simulated based on the specification of the 2050 energy strategy and the future structure of an electricity grid in 2035 was projected. It is important to consider the development from a Swiss perspective and synchronise the developments at a national level. For this reason, Swissgrid established regional coordination groups, consisting of distribution grid operators and Swissgrid representatives. This new specialist committee meets semi-annually to discuss the electricity grid developments in all parts of the country and make the necessary adjustments where necessary.

> **The electricity supply was always able to be guaranteed at a high level without the consumer noticing issues relating to the grid takeover.**

For the future development of the Swiss grid, Swissgrid is also committed to our country's strong connection to the European electricity grid. If Swiss grid projects are classed as relevant from a European perspective, Switzerland may even benefit from European funding. The planning of a European supergrid is also a pioneering goal. This project was started in 2012 and concerns the time horizon between 2020 and 2050. As the electricity hub within Europe, Switzerland has a major interest in collaborating on the planning and construction of this grid. It is extremely important for the future reliability of supply and the Swiss economy, as it will allow wind and solar electricity to be transported over long distances with minimal loss, from remote production centres to the consumption centres, as well as the intermediate storage in reservoirs depending on the supply and demand situation.

Greater grid capacity thanks to better congestion management

In 2012, Swissgrid continued to improve congestion management processes together with European transmission systems and electricity exchange operators. A new trading process with cross-border capacities was introduced at the Swiss-Italian border. Traders can now execute their transactions during the day (intraday) and purchase transmission capacities at auction. This development is part of a European initiative to optimise the grid situation at the European national borders. Apart from the border with Switzerland, this new process has also been introduced at the Italian border with France and Slovenia, with considerably improved conditions for domestic traders on the European electricity market and the creation of key requirements on the transport of renewable energies.

Refined rules for European electricity transport

Developments in the European electricity market continue to have a greater impact on Switzerland. The rules (Network Codes) for the organisation of the European electricity market are being developed by the European Network of Transmission System Operators for Electricity (ENTSO-E) as part of the implementation of the third domestic market package, including grid operation, grid connection, congestion management and control energy areas.

The involvement of all market players is crucial, as the network codes cover the entire electricity value chain from the generator to the transmission and distribution system and on to the consumer. Swissgrid plays a coordinating role in this area and helps to shape these rules with regard to the interests and needs of the Swiss electricity sector. In the past year, Swissgrid defined a new process, which involves the regular coordination of the Association of Swiss Electricity Companies (VSE) and expert teams from specialist sectors.

Cost-covering remuneration for feed-in to the electricity grid: demand greater than ever

2012 proved to be a record year for cost-covering remuneration for feed-in to the electricity grid (CRF): a total of 11,510 new projects were registered, which pushed the number of registrations to over 32,600 since the CRF was introduced in 2009. At the end of 2012, 4,804 CRF systems, generating an annual production of 1,125 GWh, were in operation. However, the situation on the waiting list has continued to deteriorate due to the financial cap for the CRF prescribed by legislation. At the end of the year, Swissgrid had over 24,600 projects on the waiting list. With new draft legislation, the Federal Council has outlined how the proportion of electricity from renewable energies will be expanded for the implementation of the 2050 energy strategy. The adoption of the proposals by Parliament will allow the waiting list to be rapidly reduced.

Intensive dialogue on grid expansion

Swissgrid has increased its dialogue with the public in the region affected by the expansion of the grid with regard to the renovation of our electricity landscape. The activities predominantly focused on the mountainous cantons of Grisons and Valais, where the expansion of the grid is a high priority and where the greatest bottlenecks in the Swiss transmission system exist.

« The close contact with the public gave Swissgrid important insights and stimuli. »

The objective was to raise the public awareness of Swissgrid's concerns for the current expansion projects and to promote the open and objective discussion of important questions and topics. Furthermore, interactive applications and audio experiences allowed interested parties to familiarise themselves with the various facets and technical opportunities in the grid expansion. The close contact with the public gave Swissgrid important insights and stimuli. This is important, as a broad social acceptance is necessary for the successful and timely completion of the upcoming line construction projects.

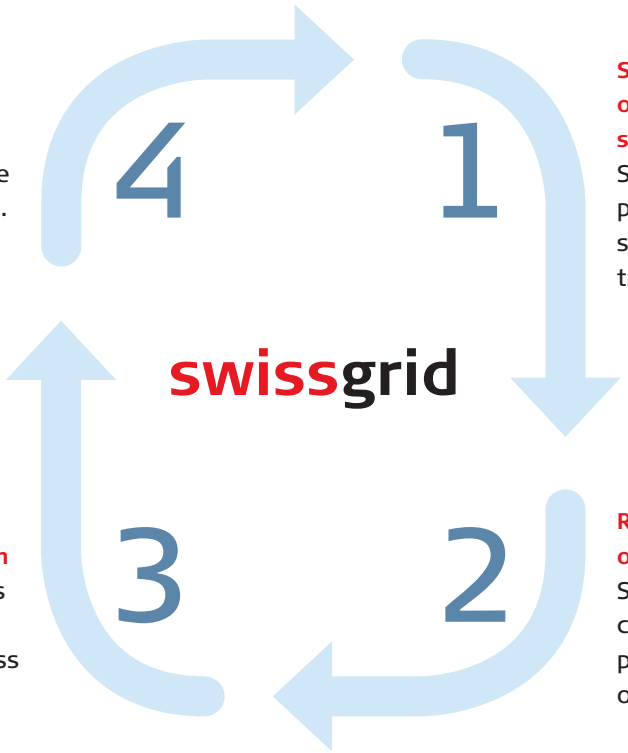
Organisation, skills and corporate development

Swissgrid's rapid growth and the assumption of new tasks as the grid owner necessitated the restructuring and optimisation of existing business processes and the recruitment of new specialists. Around 80 new employees were appointed in the year under review. Swissgrid's rank among the top 100 employers for

Swissgrid's new responsibilities as grid owner

Financing grid expansion
Swissgrid is responsible for financing the expansion of the grid.

Strategic development of the transmission system
Swissgrid develops and plans the long-term structure of the Swiss transmission system.

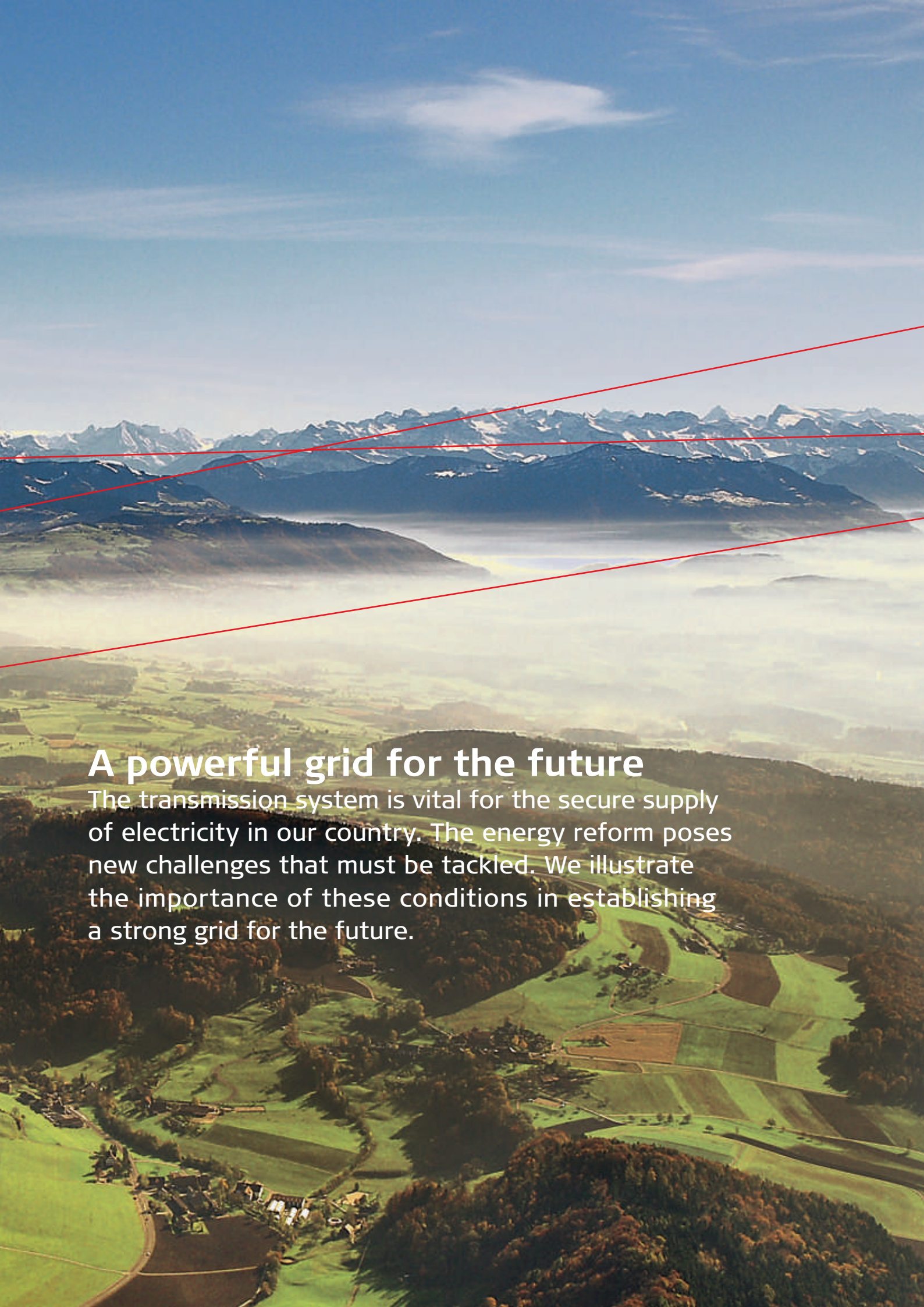


Maintenance of the transmission system
Swissgrid coordinates all the measures for maintaining the Swiss transmission system.

Responsibility for on-going grid projects
Swissgrid takes over current grid construction projects from the previous owners.

engineers in Switzerland shows that it is an attractive employer. This survey was carried out by the trendence research institute, which surveys graduates every year on their career plans and dream employers. To ensure that Swissgrid continues to become more attractive in the future, the Executive Board also approved an integrated staff and organisational development concept in the year under review. This provides for overarching as well as individual training and continuing education opportunities for all employees.

Those with high potential, managerial staff and employees already benefited from the extensive range of in-house seminars in 2012. In the future, Swissgrid will also offer its employees further development opportunities with international partner companies. This new exchange programme will promote the exchange of know-how among transmission system operators throughout Europe.



A powerful grid for the future

The transmission system is vital for the secure supply of electricity in our country. The energy reform poses new challenges that must be tackled. We illustrate the importance of these conditions in establishing a strong grid for the future.

“Switzerland is an eldorado for high voltage technology”

Interview with Prof. Dr Christian Franck, Head of the High-Voltage Technology department in the Power Systems and High-Voltage Laboratories at the ETH Zurich

The electricity sector is changing. What new technical requirements do you see in the high-voltage grid? We now want to generate energy from renewable sources. This can be produced at decentralised locations in large-scale plants or locally in the municipalities. However locally produced electricity is not able to cover the entire demand. So, for example, energy has to be transported from offshore windparks on the North and Baltic seas to consumption centres in Central Europe. This is one of the great challenges: transmitting a large amount of energy over great distances.

And what is another challenge? We have previously been accustomed to adapting the electricity produced by power plants to consumer demand. However wind and solar energy must be used when it is generated. It is difficult to control. Fluctuating supply is the second major challenge.

And what answers has the research provided? You could simply install new AC lines in coastal regions in line with the previous state of technology. But this would not be the best solution as it would require too great an expansion. We now have new and more efficient technology: high-voltage direct-current transmission.

But it is actually also very old … Exactly. The first systems in the 19th century were based on direct current. However the real move forward only occurred when power-electronic components provided the opportunity to convert this direct current from one voltage level to another or convert it to alternating current. This technology has developed considerably in the past ten to twenty years and we will continue to see a number of improvements and efficiency increases in this area in the near future.

The offshore windparks are already there, so why not also direct-current grids? It is already possible to operate a point-to-point connection with direct current. However, the technology required to combine

the whole into a single grid is still lacking. One of the big questions is also how to detect faults if lightning strikes somewhere, for example. With direct current, this fault can affect the entire grid, which spans thousands of kilometres. Despite this, in my opinion, direct current is one of the most important technologies of the future.

The laying of electricity transmission lines underground is currently the subject of many discussions. Underground cabling is also easier with direct current than with alternating current. However underground cables are not as efficient as overhead lines, as the heat arising during the transmission of electricity is difficult to discharge. One solution would be to insulate the cable with gas. The perfect insulating gas already exists: sulphur hexafluoride. But this has a greenhouse gas potential that is 25,000 times greater than carbon dioxide. This is why we are looking for alternatives.

Do existing overhead lines have any further optimisation potential? The existing infrastructure can certainly be improved with regard to transmission capacity and reliability. One example is temperature-dependent utilisation. This means that as much electricity as allowed by the ambient air temperature should always be transported. At the High Voltage Laboratory we are tackling the question of what the highest possible loading capacity of a cable is depending on the ambient temperature without ageing the cable too severely. These limits are what we are now interested in. Previously there were still sufficient reserve capacities, so this question was not as important.

You conduct basic research at your laboratory. What is your assessment of the state of the research applied in companies in Switzerland? In Switzerland there is an unbelievably large number of companies that are concerned with high-voltage technology. For example, the company Weidmann in Rapperswil in the canton of St. Gallen is a global leader in the area of transformer insulation. Micafil in Zurich-Altstetten, part of ABB Switzerland, delivers insulators throughout the world. Others include Pfisterer Sefag in Malters, near Lucerne, and Axicom, which has now been renamed TE Connectivity Solutions. Most recently, ABB announced the development of a direct-current switch that can switch off residual currents that are well above the normal-current. Switzerland is truly an eldorado for high-voltage technology.

About the interviewee

Professor Christian Franck (40) has been head of the High-Voltage Technology Division in the Power Systems and High Voltage Laboratories at ETH Zurich since the start of 2010. He previously worked at the ABB Research Centre in Baden AG as a scientist and group leader for six years. He studied physics at Bonn, Edinburgh and Kiel universities and completed his dissertation in experimental physics at the Max-Planck-Institut in Greifswald in 2003. He is married and has three children.

The High-Voltage Technology division of the Power Systems and High-Voltage Laboratories focuses on three areas of research. The high-voltage direct-current transmission system technology, new insulating gas mixtures, such as those required for underground power transmission lines, and issues surrounding the optimised utilisation of the existing infrastructure. The latter point also includes issues regarding temperature-dependent capacity utilisation, which the laboratory is investigating together with Swissgrid and other partners.

Research under new conditions

The transmission system is faced with new requirements. In order to meet these requirements, research is also faced with new questions. In this regard, Swissgrid is active in various application projects.

The starting situation for the transmission system has changed. "The current transmission system was constructed in order to transport electricity from large power plants to the centres," says Martin Geidl, Head of System Operations at Swissgrid. In addition, it was originally designed more for cross-border neighbourly support. In the future, it will require high-performance connections to the peripheral European countries. The grid operators in Europe would have to find new coordination paths and re-align the control. The electricity consumers may also become more integrated in order to continue to secure the stability of the system. Many questions remain open and research is in full swing. Swissgrid is involved in several research projects at both a European and Swiss level.

E-Highway 2050 project.

The European Union "E-Highway 2050" research project is targeting a new, expanded transmission system in Europe, which is expected to ensure long-range transport. Transmission using direct current is one option. Swissgrid is concerned with the socio-economic aspects, the structure and the architecture of the grid as well as the issue of operating such a grid. The project started in September 2012 and will last for three years. The findings will then be implemented by 2050.

Umbrella project.

The objective of the "Umbrella" project, sponsored by the EU, is to better coordinate the operation of the state grids as a whole. This addresses questions such as the projection of electricity flows and their optimisation, as well as a new risk assessment of the grid which would, for example, also include the likelihood of occurrence of a fault. With its system, Swissgrid is providing experience in optimising the flow of electricity, which, in Geidl's opinion, is unique in Europe. If the production of the power plants has to be changed at short notice for reasons of grid stability, the Swissgrid system looks for the most efficient solution and proposes line and transformer switches in order to improve the congestion situation. The EU project started in 2011 and will run until the end of 2014.

Flexlast project.

How can electricity purchasers contribute to the stability of the grid? Swissgrid, BKW, Migros and IBM have been investigating this question at the cold-storage warehouses of the Migros distribution centre in Neuendorf SO since the start of 2012, as cold-storage warehouses are an ideal buffer that can contribute to the stability of the grid: even if they are disconnected from the electricity grid for a short period, the temperature in the warehouses does not rise above the prescribed range. Furthermore, the operators of the cold-storage warehouses benefit: they can sell this flexible capacity on the market. The Smartgrid project started in February 2013 with a trial operation in a cold-storage warehouse and will run until the end of 2013. An accompanying study is investigating the potential for smaller systems, such as cooling units in supermarkets.

"THIS TECHNOLOGY HAS TREMENDOUS POTENTIAL; WE ARE CURRENTLY ONLY AT THE VERY BEGINNING."

The research projects in which Swissgrid is involved cover a large range of new transmission system requirements. For MARTIN GEIDL, Head of System Operations at the Swissgrid Laufenburg site, European cooperation and coordination in research and planning are absolutely essential. This is also evidenced by the so-called Wide Area Monitoring, which gives operators an overall view of the interconnected European grid in real time.

Optimised
Pan-European electricity flows
electricity highway Flexible electricity
Temperature-dependent capacity utilisation
Risk-based consumption
reliability of supply

Temperature-dependent capacity utilisation for overhead lines (Tekaf) project

Heat is generated during the transmission of electricity and this has to be discharged. A line therefore has less capacity on hot summer days than on cold winter days. In the Tekaf research project, Swissgrid, together with ETH and other partners, explored the question of how the currently rather static planning of these temperature-dependent capacities could be performed more dynamically and therefore more realistically and still ensure that the conductors are not exposed to excess demand. Measurements are being conducted on a 220 kV line in a pilot system and at ETH Zurich, the Power Systems and High-Voltage Laboratories are researching the temperature limits of overhead line conductors under Professor Christian Franck (cf. interview on page 16).

Risk-based reliability of supply.

What exactly does reliability of supply mean? Risks of line faults are being modelled and calculated in a project that Swissgrid is carrying out together with the Research Centre for Energy Networks (FEN) at ETH, which it also supports. The focus is on criteria such as infrastructure, power plant capacities, climatic change, IT problems, etc. The reliability of supply was already the topic of a project concluded at the end of 2012, which investigated the impact of solar storms. The result was reassuring: thanks to its geographic location and the relatively short transmission lines in north-south direction, Switzerland and all of Central and Southern Europe do not have to worry about faults caused by geomagnetically induced currents.

Key words

Supergrid/Direct current

High-voltage direct current (HVDC) is interesting for the transport of large amounts of power over large distances. AC power, which is otherwise commonly used, is converted to DC by rectifiers at the start of the lines, and reconverted into AC at the other end. Only when lines are several hundred kilometres long do the lower transmission losses compensate for higher investment costs and losses during rectification.

Smartgrid

A Smartgrid is a grid that connects and controls producers and consumers using suitable components of the grid with the help of modern communication technologies. One of the main objectives is to balance out the volatile generation of electricity with consumption.

Wide Area Monitoring

Wide Area Monitoring is a pan-European platform that enables all grid operators to monitor the stability of the grid across large distances. The platform connects measuring stations throughout Europe, from Denmark to Southern Italy and from Portugal to Romania. This enables the grid operators to monitor processes in the electricity grid beyond their area of responsibility.

Building trust and acceptance

The Federal Council has ascribed a central role to the transmission system in the energy strategy 2050. The grid is extremely stressed and is reaching its limits more frequently: as a result, over the next ten years the major bottlenecks in the grid will be eliminated with eight priority expansion programmes.

They are a link between production and consumption and a core element of the energy supply system both nationally and internationally, according to the Federal Council in its Consultation Report on the energy strategy 2050 in the winter period 2012/13. The detailed concept was established as the electricity grid 2050 strategy in the spring of 2013. The new strategy primarily targets the clear energy policy framework conditions for the conversion and expansion of the electricity grid. The implementation plan for transmission lines (SÜL) that has been in place since 2001 will be expanded into an implementation plan for grid networks (SEN) and will primarily increase the involvement of cantons and municipalities in the search for corridors for transmission lines. Grid planning will therefore be linked with regional planning. "The current partial perspective is deviating more and more from the national perspective," says Martin Weber, Head of Project Planning for Lines at Swissgrid.

Optimising existing infrastructure

The grid must adapt to future requirements. Swissgrid is therefore developing the 2035 target grid in coordination with the Federal Government, the energy sector and European grid operators, which is based on the 2020 strategic grid and has two objectives: to eliminate existing bottlenecks and bolster the implementation of the Federal Government's energy strategy. Forecasts on the development of consumption and production are incorporated in the planning and market simulations will be used to determine the future power plant deployment and international exchanges from the energy scenarios. This will help to determine the transport requirement for 2035 and to establish the actual grid plan. The entire planning is based on the existing grid, whose principle has been abbreviated as Nova: "Grid optimisation before reinforcement before expansion."

Weak points that disrupt the flow of electricity have been an issue in the Swiss grid for many years. The Nova principle is already being applied to the existing expansion plans. The grid will be reinforced and capacity will be increased in eight priority programs with 28 sub-projects and a total investment amount of 2.8 billion francs in the coming year (cf. representation on page 22). The sub-projects are practically exclusively upgrades or new constructions on existing transmission routes or increases in the voltage from 220 kilovolts to 380 kilovolts. An actual greenfield development is only planned from Galmiz FR to Mathod VD. "The expansion and reinforcement would be an absolute necessity even without the energy reform," says Weber.

Underground cabling as an alternative?

High-voltage lines only account for one per cent of the entire electricity grid, as the high pylons with the high-voltage lines impact the landscape and inhabitants feel that they are affected by the electric and magnetic fields and noise, despite the stricter limit regulations.

Underground cabling is one alternative, even if it has not yet been subject to any practical trials for high-voltage transmission in Switzerland, besides two short connections in Spreitenbach AG and Geneva of around two and one and a half kilometres. Their advantages and disadvantages compared to overhead lines are currently being investigated as part of the implementation plan process. An evaluation scheme will be applied in the future, which will assess the overhead line or underground cable variations for environmental protection, spatial development, economic viability and technical aspects (cf. representation on page 22). The underground cabling option will be examined in studies for all the projects. Partial cabling is being worked out and scientifically supported as part of the Beznau-Birr project in the area of Riniken. The partial cabling in Riniken will be submitted into the planning approval process most probably by the end of September 2013.

Overhead line or underground cable: the Federal Government's evaluation scheme

An evaluation scheme will also be applied as part of the implementation plan for transmission lines procedure, which will specify various criteria for a project. The evaluation scheme is divided into the main aspects of environmental protection, spatial development, economic viability and technical aspects of reliability of supply and local interest, where every main aspect covers different criteria. If the underground cable connection receives a better evaluation, a subsequent analysis will determine whether the additional costs of the cabling are justified (this analysis is not required for fundamentally more favourable overhead line varieties). The scheme

Criteria for a socially acceptable and landscape-compatible grid expansion

- ☑ **Environmental protection:** landscape, protected areas, soil, forest functions/ ecological value, non-ionising radiation (NIR), noise, wildlife/fauna, water conservation, reduction of other burdens.
- ☑ **Reliability of supply:** approval periods, construction period, availability/duration of repairs, public image risks, regional planning stability (route security).
- ☑ **Community interests:** tourism/ recreation, preservation of the townscape, regional debasement, development, reduction of other burdens.

was presented to all interest groups in 2009 as part of a consultation. At the same time, it was also investigated in a practical test. In the longer term, the evaluation scheme will be integrated into the new implementation plan for the energy grid.

Consultation

Dialogue with the stakeholders from planning through to realisation is vital for grid expansion. "We go wherever the expansion projects are disputed," says Martin Kreuz, Head of Grid Dialogue. He holds discussions with stakeholders at public information events, regional trade fairs as well as other special and public events. His objective is to build trust and acceptance and find the best possible solutions.

Grid expansion in European countries

The expansion of the transmission system is a top priority for Switzerland as well as other European countries. However, different initial regulatory and structural situations often lead to different approaches.

The Netherlands: the approval process to construct a transmission line now only lasts about 1.5 years. The Dutch grid operator Tennet, which is responsible for the transmission system and the distribution grid, is planning a 230-kilometre north-west connection, a 120-kilometre south-west connection and a 60-kilometre interconnecting line to Germany. This will include 20 kilometres of underground cabling, which will also be used for research purposes. The interests of the stakeholders will be heard and integrated into the planning by way of a "Stakeholder Management".

Germany: the Network Agency responsible for the transmission system relies on universal coordination. The grid development plan defines routes and it is then submitted for public consultation via the regulator. The ordinance becomes legally binding after governmental approval.

Denmark: the objective of the grid operators responsible for the high-voltage and distribution grid is the underground cabling of the transmission lines.

Norway: Norway is ahead of most European countries with regard to the liberalisation and integration of markets and cross-border trade. The government grid operator Statnett has also already implemented Smartgrid projects in order to manage electricity consumption.

Swissgrid is preparing the grid for the future

Over the last ten years, only 150 kilometres of the grid have been renovated. Overall, 1,000 kilometres of the grid need to be upgraded and 300 kilometres built from scratch. These investments will ensure that the Swiss transmission system is able to meet its requirements well into the future.

1 Gemmi+

Two sections will be expanded from Valais to Central Switzerland for hydropower: from Bickingen to Chippis and from Chamoson to Chippis. The lines will be upgraded to the current state of the regulations and partially expanded with 380 kV lines. The expansion programme will improve the reliability of supply through integration into the European interconnected grid.

2 Goms+

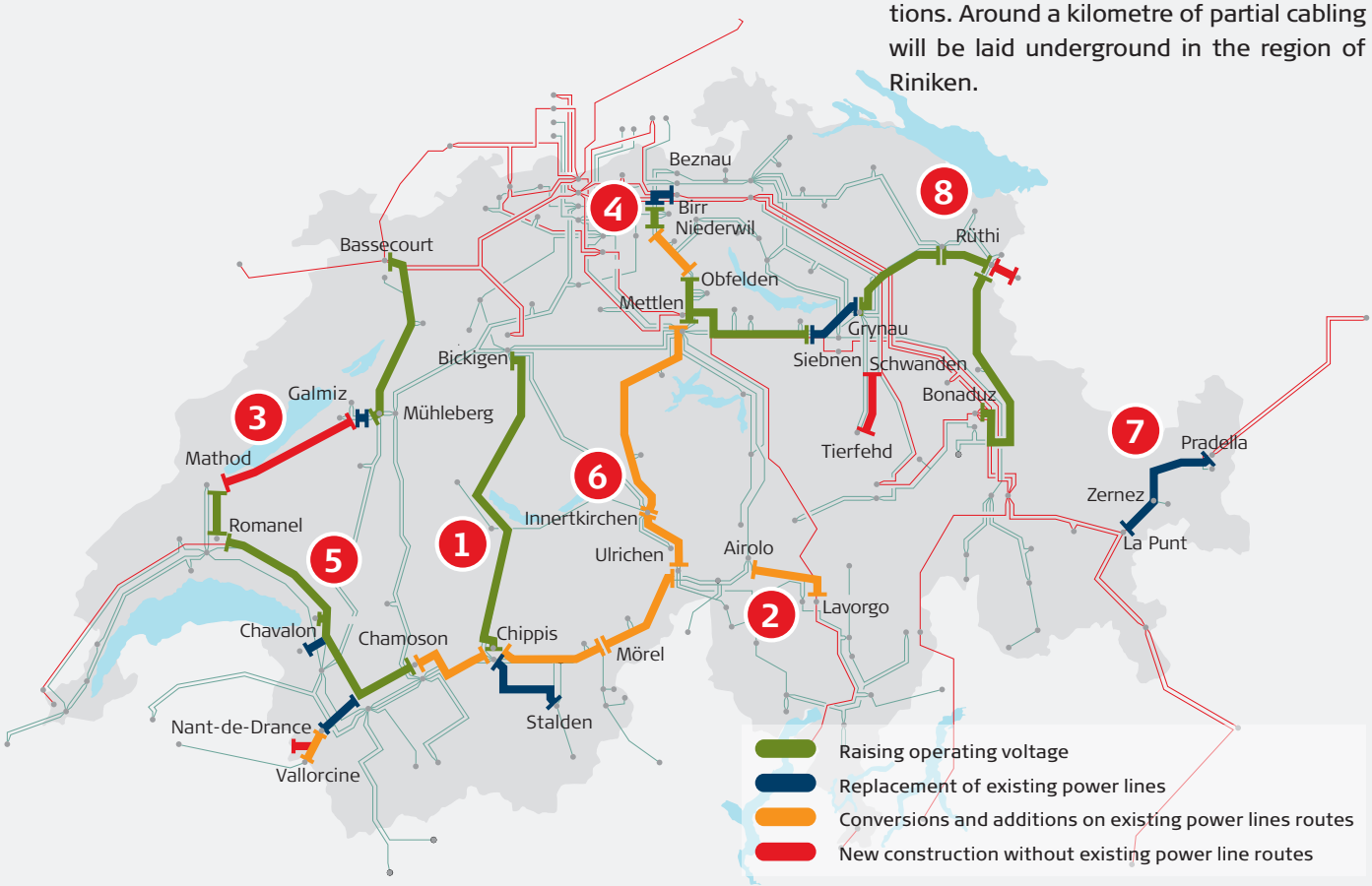
Four sections will be expanded from Valais to Central Switzerland and to Ticino towards Italy for the removal of hydropower. Existing 220 kV lines will be replaced with 380 kV lines from Chippis to Mörel, from Mörel to Ulrichen, from Airolo to Lavorgno and from Chippis to Stalden.

3 Bassecourt–Mühleberg–Romanel

Four sections will be expanded to increase the import capacity from the north and to remove hydropower from Valais: from Bassecourt to Mühleberg, from Mühleberg to Galmiz, from Galmiz to Mathod and from Mathod to Romanel. This will involve upgrading the lines to higher voltages or adapting them to the new regulations. The connection between Galmiz and Mathod will be built entirely from scratch.

4 Beznau–Mettlen

Four sections will be expanded for a higher transport capacity: from Beznau to Birr, from Birr to Niederwil, from Niederwil to Obfelden and from Obfelden to Mettlen. This involves upgrades through voltage increases and adapting to the new regulations. Around a kilometre of partial cabling will be laid underground in the region of Riniken.



"SOUND PROJECT DEVELOPMENT IS THE BEST CONTRIBUTION THAT SWISSGRID CAN MAKE TO SPEED UP THE PROCESS."

For MARTIN WEBER, Head of Project Planning for Lines at Swissgrid, these structural measures are vital, regardless of the energy reform and the Federal Government's new energy strategy, in order to continue to ensure the reliability of supply. The processes to reach the start of construction are long and are often delayed by objections.

5

Lower Valais

The removal of hydropower from Valais will be secured in two regions. The line from Chamosen to Romanel will be upgraded and the pumped storage power plant will be connected to the high-voltage grid at the Nant-de-Drance connection. The 220 kV lines will replace the 380 kV lines and a seven kilometre cable will be re-laid in the power plant tunnel. The project for a third section with a connection to Chavalon has been suspended due to great uncertainty as to whether the construction of the combined gas cycle power plant will go ahead or not.

6

Mettlen–Ulrichen

The import capacity from the north and the removal of the Valais hydropower will be increased in two sections. Existing lines will be expanded or upgraded with higher voltages from Mettlen to Innertkirchen and from Innertkirchen to Ulrichen.

7

Engadin

Four sections will be expanded by 2019 for the removal of Grisons hydropower and a higher import capacity from the north. The lines from Pradella to Zernez and from Zernez to La Punt will be expanded with higher voltages. A new ground wire will be installed from La Punt to Sils, and the Pradella substation will be adapted to the new conditions.

8

8. Mettlen–Bonaduz

The import capacity from the north will be increased in five sections. Lines from Mettlen to Siebnen, from Siebnen to Grynau, from Grynau to Rüthi and from Rüthi to Bonaduz will be expanded or upgraded to 380 kV and adapted to the new regulations. Partial cabling from Grynau to Tuggen will be investigated on the Siebnen–Grynau route. The new Rüthi substation will also be built.

Key words

Implementation plan for transmission lines (SÜL)

The Office of Energy, supported by the Office for Spatial Planning and a monitoring group, has been managing new power line processes with the overarching planning and coordination instrument (implementation plan for transmission lines) since 2001. This considers economic, environmental and transport policy as well as regional planning aspects. The SÜL process is followed for all expansion projects that have a significant impact on the area and environment, as well as all new construction projects. The implementation plan is constantly adapted to the rolling grid operator planning. The implementation plan process is followed by the plan approval process, which checks whether a specific construction project complies with the safety regulations and statutory requirements. It is expected that the implementation plan for transmission lines will be expanded into an implementation plan for energy grids.

Grid 2020/Target grid 2035

The 2020 grid, a further development of the 2015 strategic grid, is intended to eliminate existing and projected bottlenecks in the transmission grid, which are to be primarily expected in relation to the planned expansion of power plants. It is being coordinated with the expansion projects of European grid operators. The 2020 grid includes approximately 52 renewal and expansion projects. By the summer of 2013, the 2035 target grid will be developed in turn on the basis of the 2020 strategic grid in cooperation with the Swiss federal government, the industry and European grid operators.

Cooperation with European partners

Integration into the European transmission system is becoming increasingly important for Switzerland. It will secure internal supply, but will also play a major role in future challenges.

Switzerland has been an electricity hub since the 1950s and, in light of the new energy strategy, the Swiss Federal Office of Energy has ensured that it will also play a leading role in cross-border trade. Over 40 lines connect the Swiss transmission system with other countries. They transport over a tenth of all the electricity exchanged in Europe.

This role at the heart of Europe will become even more important in the future. European transmission system operators are planning a high-voltage grid in order to transport large volumes of electricity over great distances. This supergrid, or E-Highway (Electricity Highways System), will be introduced in stages from 2020 to 2050.

Electricity transmission and storage

Switzerland is not just an important transit country for north-south connections in this new grid; its pumped-storage power plants also provide large storage capacities for the irregular flow of electricity from renewable energies. This connection also has important benefits for Switzerland: it continues to ensure a secure supply.

However many technical and energy policy issues remain open. "These are the scenarios that have to be dealt with today," says Kai Adam, Head of European Matters at Swissgrid. What makes economic sense? How will society accept this highway and who will be responsible for the operation of this kind of pan-European infrastructure? A particularly difficult point is cost distribution, says Adam. Who profits from the transmission of electricity and who will pay for the infrastructure? At the heart of all this is the question: what will the energy world look like in 2050 and what must the transmission system be able to provide?

Scenarios for the world of tomorrow

Technical and energy policy questions on the development of the E-Highway will be coordinated by the European Network of Transmission System Operators for Electricity (ENTSO-E). Swissgrid is a founding member and a recognised centre of competence of ENTSO-E. Swissgrid is involved in the supergrid research (cf. page 16/17) as well as in a working group that is concerned with the energy policy questions regarding this electricity highway. In the next few years, this research project will draft and review several scenarios for 2050. According to Adam, the objective is a modular development plan.

However, grid planning has now been a cross-border issue for many years: coordination and cooperation are becoming increasingly important, even in normal operation in Europe. ENTSO-E is therefore planning

"IT IS ALSO ABOUT PROTECTING SWISS INTERESTS IN EUROPE."

ENTSO-E, E-Highway and TSC: Swissgrid is not just involved in these initiatives and projects. Additional memberships secure its vital role within Europe and the exchange of information. KAI ADAM, Head of European Matters at Swissgrid, coordinates the committee representatives on behalf of Swissgrid. "It is also about protecting Swiss interests in Europe," he says.

grid development throughout Europe with a ten-year timeframe. This Ten Year Network Development Plan (TYNPD) will integrate every grid operator's expansion and modernisation projects that are relevant for cross-border energy exchange. Rolling planning will ensure that the plans continue to be updated to the ten year timeframe every two years. Swissgrid has entered three programs with several sub-projects into this ten-year plan. These projects which are also part of the national expansion programmes.

Know what's happening in the grid

Planning is the central criterion for a transmission system operator: not just in the national grid, but increasingly at a European level. The TSC cooperation allows information to be exchanged in real-time. A coordinating service centre is currently being established, for which Swissgrid will appoint the inaugural Operational Manager.

Larger power outages, such as those at the end of 2006 in large areas of Europe, as well as the increasing share of electricity from renewable energies over the past years have shown how important the exchange of information is in grid operation. To further increase the security of the high-voltage grids, twelve Central European transmission system operators merged to form a cooperation at the end of 2008. The Transmission System Operator Security Cooperation (TSC) has a permanent Security Committee and uses a real-time information system and a joint IT platform for security analysis in the various planning periods.

The organisation is specifically highly decentralised. The responsibilities lie with the individual members, whocommunicate by video conference on a daily basis. In contrast, the second large association Coreso, which is comprised of five Western European countries, also in existence since the end of 2008, organises the central exchange of information through an internal company in Brussels.

TSC has also recognised that it requires a body with a coordinating function. A Central Service Providing Entity (CSPE) is being established in Munich for this purpose. It will contribute to improved efficiency, quality, coordination and the faster implementation of new activities. This new structure of TSC was a major concern for Swissgrid and it will therefore provide the first Operational Manager: Alexander Wirth and a team of specialists and analysts from the grid operators will prepare calculations for the entire region and ensure the exchange of information with Coreso.

Key words

ENTSO-E

The European Network for Transmission System Operators for Electricity (ENTSO-E) was founded in 2009 in order to cope with the huge demands of the grid. ENTSO-E is made up of 41 transmission system operators from 34 European countries, including Switzerland, which is a founding member. It prepares the network codes (grid operation regulations), coordinates the operators and promotes the ongoing development of the European transmission system.

TYNDP

The ENTSO-E Ten Year Network Development Plan (TYNDP) is composed of over 100 European grid operator development projects that support the EU energy policy: from the integration of the markets and renewable energies to reliability of supply. The Ten Year Network Development Plan, drafted in 2012 with a time horizon to 2022, provides for an investment of 104 billion euros in order to upgrade the high-voltage lines and construct around 51,500 kilometres of new lines in Europe. Swissgrid is involved in the TYNDP with three expansion programs.

Financial Report 2012

Contents

Financial commentary

Stable annual result – robust capital structure following successful transfer of transmission system

With the transfer of the transmission system which was consummated on 3 January 2013, a new era was also heralded in for Swissgrid from a financial point of view. As a result of an intervention of the Regulator, the transfer could only take place half a year later than planned, which led to inefficiencies in project and line work and caused significant additional cost. Furthermore, the financial year was marked by lower tariff rates than in the preceding year and by a stable earnings situation.

Swissgrid was able to achieve further progress in regulatory and legal fields. In a landmark decision, the Federal Court decided that no legal basis existed for the Regulator to preventively approve tariffs fixed by Swissgrid. In addition, the Regulator discontinued the proceedings initiated in 2011 to conduct an ex-post re-examination of 2010 operating costs and recognised in full the costs which had been asserted by Swissgrid. Swissgrid will continue to exhaust all legal means to oppose any cost curtailments which may arise in the case of other proceedings.

Procurement and operating costs

During the past financial year, the remuneration paid to power plants for the provision of control energy could be reduced by a further CHF 23.8 million to CHF 163.1 million. In addition to the high level of availability of the power plants and favourable weather conditions, a further increase in the number of vendors also contributed to this result. Furthermore, the remuneration stipulated by the Regulator in favour of grid operators (CHF 300.7 million vs. CHF 292.5 million in the prior year) accounts for nearly half of all procurement costs. In aggregate, procurements costs of CHF 620.2 million are CHF 28.8 million lower than in the preceding financial year.

Operating expenses including depreciation and amortisation and impairment losses increased year-on-year by CHF 9.8 million to CHF 132.6 million. The increase is primarily a result of an increase in employee headcount in the area of Asset Management and Service, which assumed responsibility for the transmission system from 2013 onwards. Personnel expense of CHF 70.3 million was CHF 8.3 million higher than that of the prior year.

Revenue and volume- and tariff-related timing differences

80% of Swissgrid's net turnover consists of tariff revenues. The tariffs of the three most important segments – grid utilisation, general ancillary services and active power loss – were reduced year-on-year; the decline of 24% in net turnover to CHF 759.7 million is mainly tariff-related. But also the amount of energy charged stagnated during the financial year. The final end-user volumes which are relevant for the general AS tariff, increased year-on-year only by 0.2% to 57.7 TWh.

Volume- and tariff-related timing differences i.e. realised tariff and other receipts less actual procurement, operating and capital costs year-on-

year hardly changed on a cumulative basis. Total surpluses – in terms of balance sheet, liabilities – rose slightly year-on-year by CHF 4.6 million to CHF 209.8 million. Worthy of mention is the first-time deficit in the segment grid utilisation amounting to CHF 67 million a result of lower tariff- and volume-related revenues and increased procurement and operating costs. Volume- and tariff-related timing differences flow into future tariff computations and are thus amortised/accreted in the medium term.

EBIT, financial income and net income

The operating results (EBIT) of Swissgrid are based on invested assets necessary for operations multiplied by the rate of weighted average cost of capital (WACC) of 4.14% (prior year: 4.25%). EBIT year-on-year rose marginally from CHF 12.7 million to CHF 13.3 million. The increase is primarily a result of various current capital expenditure projects and the ensuing increased level of allowable non-current assets.

Net financial expense of CHF 1.2 million (prior year: CHF 0.8 million) includes commitment fees aggregating CHF 1.1 million (prior year: CHF 0.4 million) for unused credit lines. Thanks to the rapid reduction in outstanding debtors, Swissgrid was able to avoid credit financing as early as January. Net income of CHF 9.8 million remained at the same level as in the prior year (CHF 9.7 million).

Balance sheet and cash flow statement

Excluding fiduciary positions, total assets stood at CHF 450.8 million, and exceeded the prior year's level by 11%. The increase in volume- and tariff-related timing differences under assets and liabilities in particular led to an increase in total assets. Free cash flow increased year-on-year from CHF 21 million to CHF 60.4 million. The increase is primarily a consequence of the drop of CHF 33.1 million in net current assets to CHF 128.9 million. Capital expenditures capitalised during the financial year amounted to CHF 34.5 million (prior year: CHF 39.6 million) and in addition to Project "GO!" (Grid Ownership), relate to a variety of infrastructure, IT and sector-related projects.

Outlook

Since January 2013, Swissgrid is not only responsible for the operation of the transmission system but also additionally for its maintenance, renovation and expansion. The capital structure in the wake of the successful grid hand-over is robust and geared to the long term: in addition to 30% financing with own funds, the remainder was financed in roughly equal halves by subordinated, long-term shareholders' loans with far-reaching conversion options exercisable by Swissgrid and two debenture issues placed on the capital market with terms of 7 and 12 years, respectively. Furthermore, the Company has committed credit lines aggregating CHF 325 million for the financing of operations.

Swissgrid is conscious of the fact that the transfer of the transmission system has given rise to new financial challenges. In order that the stakeholders can be compensated in line with market conditions, the Company itself is reliant on an appropriate and stable return on equity. Swissgrid thus welcomes the recent decision of the Federal Council to introduce

WACC as the new computational method which is in line with the customary practice on capital markets and enhances the attractiveness of investments in network infrastructure.

Following the successful acquisition of 17 grid companies as of 3 January 2013, the focus for the rest of the year is the time-consuming correction and integration of the transfer data of all facilities. In addition, the steps to review and update the valuation will continue to be pursued, as agreed upon between the parties to the transaction.

Luca Baroni
CFO

Income statement

In millions of CHF	Notes	2012	2011
Net turnover	4, 5	759.7	1,002.3
Other operating income	4, 6	11.0	11.7
Volume- and tariff-related timing differences	4, 14	–4.6	–229.5
Capitalised self-constructed assets		4.7	4.2
Total operating income		770.8	788.7
Cost of procurement	4, 5	620.2	649.0
Gross profit		150.6	139.7
Materials and third-party supplies	7	33.3	33.2
Personnel expenses	8	70.3	61.8
Other operating expenses	9	13.9	10.9
Earnings before interest, income taxes, depreciation and amortisation (EBIT)		33.1	33.8
Depreciation/amortisation	12	17.4	20.7
Impairment losses	12	2.4	0.4
Earnings before interest and income taxes	4	13.3	12.7
Financial income	10	0.2	0.1
Financial expenses	11	1.4	0.9
Earnings before income taxes		12.1	11.9
Income taxes		2.3	2.2
Net income		**9.8**	**9.7**

Balance sheet assets

In millions of CHF	Notes	31.12.2012	31.12.2011
Property, plant and equipment	12	51.0	43.6
Intangible assets	12	42.9	35.6
Financial investments	13	0.4	0.4
Long-term deficits arising from volume – and tariff-related timing differences	14	77.6	15.4
Non-current assets		171.9	95.0
Assets held on fiduciary basis	15	241.7	134.8
Trade accounts receivable	16	174.5	250.2
Other receivables	17	1.4	1.7
Prepaid expenses and accrued income	18	55.0	40.5
Cash and cash equivalents		48.0	17.2
Current assets		520.6	444.4
Total assets		**692.5**	**539.4**

Balance sheet equity and liabilities

In millions of CHF	Notes	31.12.2012	31.12.2011
Share capital		15.0	15.0
General reserve		1.1	0.6
Retained earnings		28.3	19.6
Total equity		44.4	35.2
Non-current provisions	19	1.2	1.2
Non-current surpluses arising from volume – and tariff-related timing differences	14	255.2	220.6
Non – current liabilities		256.4	221.8
Liabilities held on fiduciary basis	15	241.7	134.8
Current financial liabilities	20	0.0	28.0
Trade accounts payable		40.5	53.4
Other liabilities	21	5.3	8.5
Current provisions	19	0.8	0.0
Accrued expenses and deferred income	22	71.2	57.7
Current surpluses arising from volume – and tariff-related timing differences	14	32.2	0.0
Current liabilities		391.7	282.4
Total liabilities		648.1	504.2
Total equity and liabilities		**692.5**	**539.4**

Cash flow statement

In millions of CHF, excluding balance sheet items held on fiduciary basis	Notes	2012	2011
Net income		9.8	9.7
Interest expense	11	1.4	0.9
Interest income	10	–0.2	–0.1
Income tax expense		2.3	2.2
Depreciation and amortisation	12	17.4	20.7
Impairment losses	12	2.4	0.4
Increase of provisions	19	0.8	0.6
Decrease/increase of trade accounts receivable		75.7	–90.4
Decrease of other receivables		0.3	1.5
Increase/decrease of prepaid expenses and accrued income		–14.5	20.4
Change in volume – and tariff – related timing differences	4, 14	4.6	229.5
Decrease in trade accounts payable		–12.9	–36.2
Decrease/increase of other current liabilities		–3.2	7.6
Increase/decrease of accrued expenses and deferred income		11.5	–105.0
Interest received		0.2	0.1
Income taxes paid		–0.7	–1.3
Cash flow from operating activities		94.9	60.6
Investments in property, plant and equipment	12	–15.5	–21.9
Investments in intangible assets	12	–19.0	–17.7
Cash flow from investing activities		–34.5	–39.6
Repayment of current financial liabilities		–28.0	–22.0
Interest paid		–1.0	–0.5
Dividends paid		–0.6	–0.7
Cash flow from financing activities		–29.6	–23.2
Change in cash and cash equivalents		30.8	–2.2
Composition			
Cash and cash equivalents at beginning of period		17.2	19.4
Cash and cash equivalents at end of period		48.0	17.2
Change in cash and cash equivalents		**30.8**	**–2.2**

Statement of changes in equity

In millions of CHF	Share capital	General reserve	Retained earnings	Total equity
Balance at 31.12.2010	15.0	0.4	10.8	26.2
Appropriation to General Reserve	0.0	0.2	–0.2	0.0
Dividends paid	0.0	0.0	–0.7	–0.7
Net income 2011	0.0	0.0	9.7	9.7
Balance at 31.12.2011	15.0	0.6	19.6	35.2
Appropriation to General Reserve	0.0	0.5	–0.5	0.0
Dividends paid	0.0	0.0	–0.6	–0.6
Net income 2012	0.0	0.0	9.8	9.8
Balance at 31.12.2012	**15.0**	**1.1**	**28.3**	**44.4**

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

Notes to the financial statements

1. Accounting principles

General remarks

The 2012 financial statements of Swissgrid AG (hereinafter referred to as 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 company's net assets, financial position and results of operations. The accounting policies followed remained unchanged from those applied in the prior year.

Foreign currency translation

The accounting records are maintained in the local currency of Swiss francs (CHF). All monetary assets and liabilities entered into in foreign currencies are translated at the exchange rate prevailing as of the balance sheet date. Transactions in foreign currencies are translated at the average exchange rate for the month in which the transaction took place. Foreign exchange gains and losses resulting from transactions in foreign currencies are recognised in profit and loss and are presented in the same line item as the underlying transaction.

Cash flow statement

Cash and cash equivalents form the basis for the presentation of the cash flow statement. Cash flow from operating activities is calculated using the indirect method.

Revenue recognition

Revenue is recognised in profit or loss upon performance of Swissgrid's obligations. For activities regulated under the Federal Electricity Supply Act (StromVG), the measurement of the performance is based mainly on energy data directly metered on the transmission system or reported from a downstream grid level. For certain revenue and procurement positions, initial settlement values are available six weeks after delivery at the earliest, thereby rendering accruals necessary based on historical and statistical data as well as on estimates.

Activities regulated under the Federal Electricity Supply Act (StromVG)

Volume- and tariff-related timing differences (cost surpluses and deficits): According to Art. 14 StromVG, grid utilisation costs must be allocated to users on a user-pays basis. Tariffs for a financial year are determined on the basis of historical costs, which means that tariffs are usually derived from a cost basis calculated two years in advance. Due to price and volume deviations, actual expense and income vary from the tariff calculation on both the revenue and procurement sides. This results in surpluses or deficits, i.e. the tariff revenues from a financial year are higher or lower than the actual expense incurred during the same period. These volume- and tariff-related timing differences are transferred to the balance sheet and taken into account in cost calculations for future tariff periods.

EBIT regulated under StromVG: Earnings before interest and income taxes (EBIT) from StromVG-regulated activities are defined in Article 13 of

the Electricity Supply Ordinance (StromVV) and are equivalent to the interest applied to the assets required to operate the transmission system. Accordingly, operating assets consist of net current assets and non-current assets as of the end of the financial year. For the financial year 2012, the weighted average cost of capital (WACC) applied corresponds to the average rate of return on 10-year Swiss Federal bonds plus a risk-appropriate remuneration of 1.71% (prior year: 1.73%). The weighted average cost of capital for 2012 was 4.14%, as laid down by the Regulator (prior year: 4.25%).

The chargeability of Swissgrid's operating and capital costs for tariff-setting purposes is subject to approval by the Federal Electricity Commission (ElCom), which takes place ex post. If an ex post cost adjustment is imposed, an appeal may be lodged with the Federal Administrative Court. A cost adjustment impacting Swissgrid's operating results is applied whenever no appeal is lodged, or whenever an appeal's prospects for success are judged to be under 50% on the basis of a reappraisal, or whenever a legally binding ruling is issued.

Property, plant and equipment

Property, plant and equipment is carried at acquisition or manufactured cost less accumulated depreciation and amortisation and any applicable impairment losses. Depreciation and amortisation is calculated using the straight-line method on the basis of the estimated useful technical and economic lives of the assets. For the following asset categories, the useful lives are within the following ranges:

- Construction in progress: only in the case of impairment in value
- Plant and business installations: 3 to 8 years
- Expansion of operating and administrative buildings: 5 to 8 years or the term of the lease in the case of investments in real estate owned by third parties

Intangible assets

Intangible assets are carried at acquisition or manufactured cost less accumulated amortisation and any applicable impairment losses. Amortisation is calculated using the straight-line method on the basis of the estimated useful technical and economic lives of the assets. For the following asset categories, the useful lives are within the following ranges:

- Intangible assets under development: only in the case of impairment in value
- Software: 2 to 8 years
- Technical regulations: 3 to 5 years

Impairment in value

The value of property, plant and equipment and intangible assets is reviewed annually. If there is an impairment indication, the carrying value is reduced to the realisable value and an impairment loss is charged to the results of the period.

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. All items of

property, plant and equipment and intangible assets, including self-constructed assets undertaken by Swissgrid employees, are classified as property, plant and equipment. As of each balance sheet date, a review is performed to determine whether there is any construction in progress or intangible assets under development that has to be impaired. Impairment losses are recognised in the period they occur. Scheduled depreciation or amortisation of these assets begins once they are completed or ready for use.

Derivative financial instruments

Swissgrid may use 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. They are measured at market value, with any changes in value reported in the same line item in the income statement as the underlying transaction. Fixed futures contracts are carried at their current values upon initial recognition. The instruments are disclosed in the notes to the financial statements.

Accounts receivable

Accounts receivable are reported at their nominal value less any impairment losses required for business reasons.

Cash and cash equivalents

Cash and cash equivalents include cash in hand, cash at banks and deposits at banks maturing in 90 days or less. They are recognised at their nominal value.

Liabilities

Liabilities include current and non-current debts and are recognised at their nominal amount.

Provisions

A provision is recognised if there is an obligation based on an event that took place prior to the balance sheet date, the amount and/or due date of which is uncertain but capable of being estimated.

Contingent liabilities

Contingent liabilities are measured as at the balance sheet date. A provision is set aside if a cash outflow without an equivalent utilisable inflow of funds is probable. Otherwise, contingent liabilities are disclosed in the notes to the financial statements.

Interest on borrowed capital

Interest on borrowed capital is recognised as an expense in the period in which it arises.

Employee pension plan

Swissgrid 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 as from 1 January of the year in which they turn 18. They are initially covered for

disability and death, and from 1 January of the year in which they turn 25, they are also insured for retirement benefits.

Economic benefits arising from a pension fund surplus (e.g. 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 employer contribution reserves is recognised 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 recognised if the prerequisites for the creation of a provision are met. Accrued contributions, the difference between the annually calculated economic benefit from pension fund surpluses and obligations, as well as the change in the employer contribution reserve are recognised in the income statement as personnel expense.

Transactions with related parties

Related parties are organisations and persons that can have a significant influence, either directly or indirectly, on Swissgrid's financial or operating decisions. Shareholders holding at least 20% of the voting rights in Swissgrid, either alone or together with others, are considered to be related parties. As regards shareholders, other criteria in addition to the proportion of voting rights held are also taken into account (including representation in committees, possibility of exerting influence due to the shareholder structure etc.). Subsidiaries of related shareholders as well as partner plant companies whose shares are 100% owned by related shareholders are also considered to be related parties. Members of the Board of Directors and of the Executive Board are also considered to be related parties.

Provided they exist and are significant, relations with related parties are disclosed in the notes to the financial statements. All transactions are conducted at arm's length.

Segment information

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

Income taxes

Current income taxes are computed on the basis of the taxable results on an accruals basis.

2. Estimation uncertainties

Financial-statement reporting requires estimates and assumptions to be made that may have a significant impact on Swissgrid's financial statements. With respect to assets and liabilities recognised in the balance sheet, accruals and deferrals (prepaid expenses and accrued income/ accrued expenses and deferred income) and volume- and tariff-related timing differences in particular are based on various assumptions and estimates that may necessitate significant adjustments to be made. This is due to specific volumes not being available for certain revenue and procurement positions when the financial statements are prepared, as well as regulatory uncertainties. The volume- and tariff-related timing differences are also influenced by estimates used in the allocation of operating expenses to the segments.

For more information on this, the reader is referred to the notes in the sections on "revenue recognition" and "operating activities regulated under the StromVG" in note 1 on page 38 et seq. as well as the commentaries in the following section.

3. Current legal proceedings

The following list only includes rulings and proceedings in which Swissgrid is the appellant or a directly involved party. Various other appeals by third parties against these and other rulings and proceedings of ElCom are pending before the Federal Administrative Court but are not listed in this section. If a legally binding court ruling is issued, the appeals of these parties are reflected in Swissgrid's financial statements. However, they have no impact on the results of Swissgrid as they are included in the volume- and tariff-related timing differences.

	Rulings/proceedings by ElCom	Date	31.12.2012*	31.12.2011*
1	Ruling concerning 2009 costs and tariffs for grid level 1 utilisation and ancillary services	06.03.2009	g	e
2	Ruling concerning 2010 costs and tariffs for grid level 1 utilisation and ancillary services	04.03.2010	g	d
3	Ruling concerning 2011 costs and tariffs for grid level 1 utilisation and ancillary services	11.11.2010	d	d
4	Ruling concerning 2009 approval of AS costs	14.04.2011	f	d
5	Proceedings concerning 2010 operating costs for grid incl. AS	24.01.2012	g	b
6	Ruling concerning 2012 costs and tariffs for grid level 1	12.03.2012	d	c
7	Proceedings concerning 2011 volume- and tariff – related timing differences	05.02.2013	a	–
8	Application for examination of lawfulness of Swissgrid receivables arising from 2010 ITC losses	28.09.2011/ 26.10.2011	a	a
9	Proceedings concerning the transaction regarding the transmission network	14.03.2011	g	a

* As defined in the following legend, the letter indicates the status of the legal proceedings:

Character	Procedural steps/stage of appeal
a	Opening of proceedings by ElCom
b	Examination report submitted and right of fair hearing exercised
c	Notification of the decision by ElCom
d	Appeal to the Federal Administration Court
e	Judgement pronounced by the Federal Administrative Court
f	Appeal to the Federal Court
g	Legally binding judgement pronounced

Information on current proceedings

Points 1 and 4 (2009): On 20 November 2012, the Federal Court returned a judgement on the appeal lodged by Swissgrid concerning the 2009 tariff ruling of ElCom thereby upholding the position of Swissgrid. The Federal Court maintained that the Electricity Supply Act provides for no preventive approval obligation by ElCom for the tariffs fixed by grid operators.

In April 2010, ElCom commenced proceedings for the purpose of subsequently approving the 2009 costs of the general AS. The ruling of 14 April 2011 approved the AS procurement costs in full, but CHF 1.2 million of the operating costs were classified as not being chargeable.

On 9 May 2012, the Federal Administrative Court decided to combine the proceedings of Swissgrid with those of the power plants and returned the matter to ElCom. The power plants lodged an appeal against the judgement with the Federal Court.

Points 2 and 5 (2010): For similar reasons to the tariff ruling of 2009, Swissgrid appealed against the 2010 tariff ruling to the Federal Administrative Court. After the decision of the Federal Court concerning the 2009 tariffs was available, Swissgrid could withdraw its appeal; the proceedings thus became superfluous.

Furthermore, on 11 April 2002, ElCom suspended its proceedings to re-examine the 2010 operating costs and recognised the 2010 operating costs asserted by Swissgrid.

Points 3 and 7 (2011): Swissgrid lodged an appeal against the 2011 tariff ruling for similar reasons as in previous years. The 2011 operating and capital costs are CHF 8.8 million higher than the comparable 2010 cost basis approved by ElCom.

On 5 February 2013, ElCom launched ex-post proceedings to re-examine the 2011 volume- and tariff-related timing differences for all tariff segments. Should it be ultimately ruled that the costs included in the volume- and tariff-related timing differences be reduced, Swissgrid would also be compelled to initiate legal proceedings.

Point 6 (2012): Swissgrid lodged an appeal with the Federal Court against the 2012 tariff ruling. The 2012 operating and capital costs are CHF 12.3 million higher than the comparable 2010 cost basis approved by ElCom. An ex-post re-examination for 2012 remains reserved.

Summary of proceedings – points 1 to 7: From Swissgrid's perspective, the cumulative risk for non-chargeable costs as of 31 December 2012 is CHF 22.3 million (CHF 1.2 million for 2009, CHF 8.8 million for 2011 and CHF 12.3 million for 2012).

Swissgrid's Board of Directors and Executive Board are of the clear opinion that all costs for the years 2009, 2011 and 2012 were incurred within the framework of Swissgrid's legal mandate and should therefore qualify as chargeable. Based on this assessment, Swissgrid has treated all operating and capital costs as being chargeable and consequently recognised them in full in the volume- and tariff-related timing differences.

A legally binding judicial decision on the afore-mentioned pending proceedings should not available prior to the end of 2013. Should the costs asserted not be qualified as being chargeable contrary to the view taken by Swissgrid, this would impact the 2013 financial statements, at the

earliest. Even in the event that the maximum risk of CHF 22.3 million crystallises, the equity situation of Swissgrid is not jeopardised as a result of the capital increase in connection with the acquisition of the transmission system which took place on 3 January 2013.

Point 8: ElCom's 2010 tariff ruling requires that shortfalls in revenues from ITC – international transit system operator (TSO) compensation – be charged to the Swiss contracting parties of international power supply contracts (long-term contract (LTC) holders) on a user-pays basis. Various LTC holders subsequently petitioned ElCom to review the legality of this charge. The proceedings have been suspended until a legally valid court ruling has been reached on the appeal against the 2010 tariff ruling.

Swissgrid expects the court to uphold the charges to LTC holders provided for in the ruling and therefore has not adjusted the value of its claims against LTC holders in the amount of CHF 43.1 million as at 31 December 2012. If these claims become unenforceable as a result of a court ruling to the contrary, they would be included in the volume- and tariff-related timing differences and therefore would have no effect on Swissgrid's income situation.

Point 9: In 2011, ElCom initiated proceedings to monitor the transaction involving the transfer the transmission network and thereby re-examine the admissibility of capital structure provided for in the Memorandum of Understanding (MoU) as well as the sustainability of the financing. On 20 September 2012, ElCom suspended the proceedings. The transaction may thus proceed in conformity with the MoU and the transaction costs are capitalisable.

4. Segment reporting

Segment report 2012

In millions of CHF	Total	Grid utilisation	General ancillary services/ balance energy	Active power loss (Individual ancillary services)
Net turnover	759.7	332.8	340.4	73.0
Other operating income	11.0	0.3	0.1	0.0
Volume – and tariff – related timing differences	– 4.6	67.1	– 69.5	– 8.9
Total operating income	766.1	400.2	271.0	64.1
Cost of procurement	– 620.2	– 300.7	– 257.5	– 61.4
Gross profit	145.9	99.5	13.5	2.7
Operating expenses	– 112.8	– 79.5	– 10.0	– 1.5
Depreciation/amortisation	– 19.8	– 11.7	– 1.9	– 0.3
Earnings before interest and income tax (EBIT)	**13.3**	**8.3**	**1.6**	**0.9**

For segment reporting, the costs of self-constructed assets are deducted from operating expenses and are therefore not included in total operating results. Volume- and tariff-related timing differences: negative figures represent surpluses, and positive figures deficits.

Movement in volume- and tariff-related timing differences

In millions of CHF	Total	Grid utilisation	General ancillary services/ balance energy	Active power loss (Individual ancillary services)
Net turnover	759.7	332.8	340.4	73.0
Other operating income	11.0	0.3	0.1	0.0
Cost of procurement	– 620.2	– 300.7	– 257.5	– 61.4
Operating expenses	– 112.8	– 79.5	– 10.0	– 1.5
Depreciation/amortisation	– 19.8	– 11.7	– 1.9	– 0.3
Earnings before interest and income tax (EBIT)	– 13.3	– 8.3	– 1.6	– 0.9
Volume – and tariff – related timing differences	**4.6**	**– 67.1**	**69.5**	**8.9**

Volume- and tariff-related timing differences: negative figures represent surpluses, and positive figures deficits.

Reactive energy (Individual ancil-lary services)	Balance groups	Eliminations	Activites according to StromVG	Further activities
2.2	13.8	–2.5	759.7	0.0
0.0	0.0	0.0	0.4	10.6
5.2	1.5	0.0	–4.6	0.0
7.4	15.3	–2.5	755.5	10.6
–3.1	0.0	2.5	–620.2	0.0
4.3	15.3	0.0	135.3	10.6
–2.4	–10.8	0.0	–104.2	–8.6
–0.5	–4.0	0.0	–18.4	–1.4
1.4	**0.5**	**0.0**	**12.7**	**0.6**

Reactive energy (Individual ancil-lary services)	Balance groups	Eliminations	Activites according to StromVG	Further activities
2.2	13.8	–2.5	759.7	0.0
0.0	0.0	0.0	0.4	10.6
–3.1	0.0	2.5	–620.2	0.0
–2.4	–10.8	0.0	–104.2	–8.6
–0.5	–4.0	0.0	–18.4	–1.4
–1.4	–0.5	0.0	–12.7	–0.6
–5.2	**–1.5**	**0.0**	**4.6**	**0.0**

Segment report 2011

In millions of CHF	Total	Grid utilisation	General ancillary services/ balance energy
Net turnover	1,002.3	381.0	532.1
Other operating income	11.7	0.0	–0.3
Volume – and tariff – related timing differences	–229.5	–2.1	–225.4
Total operating income	784.5	378.9	306.4
Cost of procurement	–649.0	–292.5	–276.1
Gross profit	135.5	86.4	30.3
Operating expenses	–101.7	–68.1	–20.3
Depreciation/amortisation	–21.1	–12.4	–5.4
Earnings before interest and income tax (EBIT)	**12.7**	**5.9**	**4.6**

For segment reporting, the costs of self-constructed assets are deducted from operating expenses and are therefore not included in total operating results. Volume- and tariff-related timing differences: negative figures represent surpluses, and positive figures deficits.

Movement in volume- and tariff-related timing differences

In millions of CHF	Total	Grid utilisation	General ancillary services/ balance energy
Net turnover	1,002.3	381.0	532.1
Other operating income	11.7	0.0	–0.3
Cost of procurement	–649.0	–292.5	–276.1
Operating expenses	–101.7	–68.1	–20.3
Depreciation/amortisation	–21.1	–12.4	–5.4
Earnings before interest and income tax (EBIT)	–12.7	–5.9	–4.6
Volume – and tariff – related timing differences	**229.5**	**2.1**	**225.4**

Volume- and tariff-related timing differences: negative figures represent surpluses, and positive figures deficits.

Active power loss (Individual ancillary services)	Reactive energy (Individual ancillary services)	Eliminations	Activites according to StromVG	Further activities
91.6	1.0	–3.4	1,002.3	0.0
0.0	0.0	0.0	–0.3	12.0
–11.8	9.8	0.0	–229.5	0.0
79.8	10.8	–3.4	772.5	12.0
–76.4	–7.4	3.4	–649.0	0.0
3.4	3.4	0.0	123.5	12.0
–1.3	–2.5	0.0	–92.2	–9.5
–0.5	–0.8	0.0	–19.1	–2.0
1.6	**0.1**	**0.0**	**12.2**	**0.5**

Active power loss (Individual ancillary services)	Reactive energy (Individual ancillary services)	Eliminations	Activites according to StromVG	Further activities
91.6	1.0	–3.4	1,002.3	0.0
0.0	0.0	0.0	–0.3	12.0
–76.4	–7.4	3.4	–649.0	0.0
–1.3	–2.5	0.0	–92.2	–9.5
–0.5	–0.8	0.0	–19.1	–2.0
–1.6	–0.1	0.0	–12.2	–0.5
11.8	**–9.8**	**0.0**	**229.5**	**0.0**

The legal basis for the chargeability of capital costs within the StromVG-regulated area of activity is explained in Note 1 on page 38. Earnings before interest and income taxes (EBIT) within StromVG-regulated activities correspond to the costs of capital by segment plus taxes on the invested assets required by operations. The individual expense and income positions assigned to the five segments within the StromVG-regulated activities are listed in Note 5 on page 52.

Grid utilisation: The grid utilisation segment reports expenses for the operating and capital costs of the transmission system, which are financed by tariff revenues and the auction proceeds of congestion capacities at national borders. This segment includes also a share of the charges for the international transit flow (ITC) as well as the compensatory individual charges to long-term supply contract holders abroad (LTC). A portion of these ITC and LTC revenues flows also into the segment active power losses. Procurement costs of CHF 300.7 million (prior year: CHF 292.5 million) correspond to the compensation paid to transmission system owners for the operating and capital costs of the transmission system as stipulated by the Regulator. These also include the costs for the provision of metering data as well as the residual costs from the national redispatch.

In the financial year, the segment grid utilisation reported a deficit of total costs in the amount of CHF 67.1 million (prior year: surplus of CHF 2.1 million). The lower grid utilisation tariffs are the main reason for the 13.6% lower tariff revenues in comparison to the prior year.

General ancillary services/balance energy: The largest expense item for this segment is control power provision, i.e. the reservation of power plant capacity in the interests of balancing energy consumption and energy injection. In addition, expenses and income in relation to control power and balance energy, which have a mutual influence on each other, are also part of this segment, as are expenses for voltage maintenance/reactive energy (proportionately), automatic start-up and island operation capability, as well as expenses and income from unintentional deviation with adjacent control areas. Finally, the costs paid to producers for grid enhancements also fall under this segment.

The expenses relating to general ancillary services (AS) are covered primarily by tariff revenues. The general AS tariff ruling for 2012 was considerably lower level than in the previous year. The reason for this is the lower procurement costs and the discontinuation of the charge-back surcharge. The surcharge was raised in 2011 because it was no longer allowed to charge the AS residual costs to power plants with a minimum capacity of 50 MW, following the Federal Administrative Court's ruling upholding the first appeal by one power plant against ElCom's 2009 and 2010 tariff rulings in July 2010. As of the date of this report, the reimbursement of the costs passed on to the appellant power plants in 2009 and 2010 could not be fully settled as a result of the pending judicial proceedings.

The segment general AS/balance energy finished the year with a cost surplus of CHF 69.5 million (prior year: surplus of CHF 225.4 million). Included therein is a surplus of CHF 0.1 million relating to the effect of AS

charge-back accruals (prior year: cost deficit of CHF 9.2 million). The aforementioned general AS tariff reduction is the main cause for the 39.1% lower tariff revenues than in the preceding year.

Active power losses (individual ancillary services): This segment reports expenses and income in relation to active power losses in the transmission system. In addition to tariff revenues, a part of ITC (international TSO compensation) and LTC revenues (long-term international supply contracts) flow into this segment (see remarks on the segment grid utilisation on page 50). The procurement of energy to compensate active power losses takes place on the spot market and via tenders.

In the financial year, the segment reported a surplus of total costs in the amount of CHF 8.9 million (2010: surplus of CHF 11.8 million). The 33.3% decline in tariff receipts year-on-year is primarily a consequence of the lower tariffs for active power losses.

Reactive energy (individual ancillary services): The supply of reactive energy to maintain the required operating voltage is ensured by means of contractual agreements with several power plants. Procurement costs are covered partly by an individual tariff for reactive energy and partly by the general AS tariff.

A cost deficit of CHF 5.2 million was recorded in the year under review (prior year: deficit of CHF 9.8 million).

Balance groups: In contrast to prior years, two tariffs were charged to the balance groups which are based upon trading and consumption volumes. The tariffs charged stipulated by ElCom aim to cover Swissgrid costs for balance management on a user-pays basis. In the prior year, these costs were included primarily in the segment General Ancillary Services/Balance Energy.

In this new segment, 2012 resulted in a deficit of total costs of CHF 1.5 million.

5. Net turnover and cost of procurement regulated by the Electricity Supply Act (StromVG)

In millions of CHF	Segment	2012	2011
Tariff income for grid utilisation	A	282.0	326.3
Net income from ITC	A/C	28.5	23.6
Income from LTC-owners	A/C	11.2	16.6
Income from auctions	A	40.0	40.0
Tariff income for general ancillary services (AS) and income from unintentional deviation	B	271.3	445.8
thereof ordinary		270.6	449.5
thereof subsequent charging for 2009 and 2010		0.7	–3.7
Charge of residual costs to plants ≥ 50 MW	B	–0.6	–5.5
thereof for 2010		–0.6	–1.2
thereof for 2009		0.0	–4.3
Income from AS energy and from balance group/balance energy	B	69.7	91.8
Tariff income for active power loss	C	44.1	66.1
Tariff income for reactive energy	D	2.2	1.0
Tariff income balance groups	E	13.8	0.0
Eliminations		–2.5	–3.4
Net turnover		**759.7**	**1,002.3**
Operating expenses for transmission system	A	144.9	131.6
Capital expenses for transmission system	A	155.8	160.9
Expenses for AS control power provision and unintentional deviation	B	163.8	189.9
Expenses for automatic start-up/island operation capability	B	1.1	1.1
Expenses for grid enhancement	B	12.5	2.2
Expenses for AS energy and for balance groups/balance energy	B	54.3	65.8
Expenses for compensation of active power loss	C	61.4	76.4
Expenses for reactive energy/voltage maintenance	B/D	28.9	24.5
Eliminations		–2.5	–3.4
Cost of procurement		**620.2**	**649.0**

Letters used for segment allocation:
A = Grid utilisation
B = General ancillary services/balance energy
C = Active power losses (individual ancillary services)
D = Reactive energy (individual ancillary services)
E = Balance groups

Segment reporting can be found in Note 4 on page 46.

Revenues from ITC consist of the following:
– Compensation for grid utilisation (A) CHF 7.4 million (prior year: CHF 8.0 million)
– Compensation for active power losses (C) CHF 21.1 million (prior year: CHF 15.6 million)

The ITC compensation for grid utilisation corresponds to net income. Supervisory charges to ElCom and to the Swiss Federal Office of Energy (SFOE) in the amount of CHF 3.0 million (prior year: CHF 2.5 million) are deducted from the gross income of CHF 10.4 million (prior year: CHF 10.5 million).

Revenues from LTC holders comprise the following:
– Compensation for grid utilisation (A) CHF 3.4 million (prior year: CHF 6.7 million)
– Compensation for active power losses (C) CHF 7.8 million (prior year: CHF 9.9 million)

Reactive energy/voltage maintenance expense may be analysed as follows:
General AS (B): CHF 25.8 million (prior year: CHF 17.1 million)
Reactive energy (D): CHF 3.1 million (prior year: CHF 7.4 million)

Eliminations: active power losses are a separate internal balance group. As a result, internal transactions occur between the segments general ancillary services/balance energy and active power losses.

6. Other operating income

In millions of CHF	2012	2011
Energy act clearing	4.4	4.4
Auction clearing	4.5	6.0
Issuance of guarantees of origin for renewable energies	1.4	1.1
Other	0.7	0.2
	11.0	**11.7**

Energy act clearing contains expenditures in connection with CRF (compensatory feed-in remuneration) and ACF (additional cost financing).

7. Materials and third-party supplies

In millions of CHF	2012	2011
Expenses for projects, advisory and maintenance	25.5	26.5
Hardware/software maintenance	7.8	6.7
	33.3	**33.2**

Material and third-party supplies include expenses for strategic projects amounting to CHF 13.6 million (prior year: CHF 16.2 million). CHF 7.9 million of this figure (prior year: CHF 9.8 million) relate to the establishment of the Asset Management division and preparations for the transfer of the transmission system.

8. Personnel expenses

In millions of CHF	2012	2011
Salaries, bonuses, allowances	56.3	49.8
Employee insurance	8.9	7.3
Other personnel expenses	5.1	4.7
	70.3	**61.8**
Headcount at 31.12.		
Permanent employment:		
Number of employees	389.0	359.0
expressed as full-time equivalents	380.7	350.0
Fixed-term employment:		
Number of employees	21	18
expressed as full-time equivalents	20.4	16.7

Other personnel expenses include in particular the temporary filling of existing positions with external resources on a fixed-term basis, as well as expenses for training and further education, recruitment as well as employee lump-sum expense allowances.

Executive Board remuneration

In millions of CHF	2012	2011
Fixed remuneration (incl. lump-sum expense allowances)	2.29	2.35
Variable remuneration	0.55	0.70
Non-cash benefits [1]	0.03	0.03
Pension benefits [2]	0.44	0.50
Total remuneration to the Executive Board	**3.31**	**3.58**
Of which to the highest earning member of the Executive Board		
Fixed remuneration (incl. lump-sum expense allowances)	0.51	0.51
Variable remuneration	0.05	0.13
Pension benefits [3]	0.09	0.08
Total remuneration to the highest earning member of the Executive Board	**0.65**	**0.72**

[1] Non-cash benefits include the private use of business vehicles.
[2] Pension benefits include employer contributions to social security schemes and the employee pension plan.

Further information on the members of the Executive Board is to be found in the Corporate Governance Report on page 78.

9. Other operating expenses

In millions of CHF	2012	2011
Rental and occupancy costs	5.6	5.4
Rental costs for communication equipment/telecommunication expense	2.2	1.8
Board of Directors fees and expenses, incl. social costs	1.0	1.0
Actual expenses for travel and subsistence for employees and third parties	2.4	1.9
Fees, dues and licenses	0.2	0.8
Insurance	0.3	0.2
Other administrative costs	2.2	–0.2
	13.9	**10.9**

Fees and expenses payable to the members of the Board of Directors represent fixed gross remuneration. Remuneration to the Chairman of the Board of Directors who was in office until 10 December 2012 totalled CHF 235,734 including expenses (prior year: CHF 253,000). In 2011 and 2012, the other members of the Board of Directors received remuneration of between CHF 55,000 and CHF 66,234 including expenses. One Board member in 2012 received additional compensation of CHF 40,000 (prior year: CHF 40,000) for chairing the Steering Committee responsible for the transfer of the transmission system.

Further information on the members of the Board of Directors can be found in the Corporate Governance Report on page 74.

The release of no longer required accruals of CHF 2 million in 2011 led to an income in the position “other administrative expenses”.

10. Financial income

In millions of CHF	2012	2011
Interest income	0.2	0.1
	0.2	**0.1**

11. Financial expense

In millions of CHF	2012	2011
Interest expenses	0.3	0.5
Commitment fees	1.1	0.4
	1.4	**0.9**

12. Non-current assets

Summary of plant, property and equipment – 2012

In millions of CHF	Advances and construction in progress	Plant and business equipment installations	Operating and administrative buildings	Total
Acquisition cost at 1.1.2012	22.3	33.5	11.0	66.8
Additions	11.1	4.4	0.0	15.5
Disposals	0.0	0.0	0.0	0.0
Reclassifications	–3.3	3.0	0.0	–0.3
Acquisition cost at 31.12.2012	30.1	40.9	11.0	82.0
Accumulated depreciation and amortisation at 1.1.2012	0.0	18.2	5.0	23.2
Depreciation and amortisation expense	0.0	6.2	1.6	7.8
Impairment losses	0.0	0.0	0.0	0.0
Disposals	0.0	0.0	0.0	0.0
Accumulated depreciation and amortisation at 31.12.2012	0.0	24.4	6.6	31.0
Net book value at 1.1.2012	22.3	15.3	6.0	43.6
Net book value at 31.12.2012	**30.1**	**16.5**	**4.4**	**51.0**

Summary of plant, property and equipment – 2011

In millions of CHF	Advances and construction in progress	Plant and business equipment installations	Operating and administrative buildings	Total
Acquisition cost at 1.1.2011	7.7	28.8	9.2	45.7
Additions	16.4	4.6	0.9	21.9
Disposals	0.0	–0.8	0.0	–0.8
Reclassifications	–1.8	0.9	0.9	0.0
Acquisition cost at 31.12.2011	22.3	33.5	11.0	66.8
Accumulated depreciation and amortisation at 1.1.2011	0.0	12.6	3.4	16.0
Depreciation and amortisation expense	0.0	6.4	1.6	8.0
Impairment losses	0.0	0.0	0.0	0.0
Disposals	0.0	–0.8	0.0	–0.8
Accumulated depreciation and amortisation at 31.12.2011	0.0	18.2	5.0	23.2
Net book value at 1.1.2011	7.7	16.2	5.8	29.7
Net book value at 31.12.2011	**22.3**	**15.3**	**6.0**	**43.6**

IT installations totalling CHF 0.3 million (prior year: CHF 0.1 million) and construction work totalling CHF 0.9 million (prior year: CHF 2.8 million) were purchased from related parties. During the accounting period, project costs of CHF0.3 million, including in construction in progress in the prior year, were allocated to intangible assets in progress and reclassified accordingly.
As of 31 December 2012, fire insurance values were unchanged from the previous year at CHF 37.5 million.

Summary of intangible assets – 2012

	Software			Technical regulations		
In millions of CHF	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
Acquisition cost at 1.1.2012	51.0	9.8	60.8	5.7	2.3	8.0
Additions	3.3	0.5	3.8	0.0	0.0	0.0
Disposals	–0.5	0.0	–0.5	0.0	0.0	0.0
Reclassification	2.7	0.5	3.2	0.0	0.0	0.0
Acquisition cost at 31.12.2012	56.5	10.8	67.3	5.7	2.3	8.0
Accumulated amortisation at 1.1.2012	37.0	6.4	43.4	5.4	1.8	7.2
Amortisation expense	7.5	1.6	9.1	0.2	0.3	0.5
Impairment losses	0.0	0.0	0.0	0.0	0.0	0.0
Disposals	–0.5	0.0	–0.5	0.0	0.0	0.0
Accumulated amortisation at 31.12.2012	44.0	8.0	52.0	5.6	2.1	7.7
Net book value at 1.1.2012	14.0	3.4	17.4	0.3	0.5	0.8
Net book value at 31.12.2012	**12.5**	**2.8**	**15.3**	**0.1**	**0.2**	**0.3**

Summary of intangible assets – 2011

	Software			Technical regulations		
In millions of CHF	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
Acquisition cost at 1.1.2011	42.6	7.9	50.5	5.7	2.3	8.0
Additions	5.2	0.6	5.8	0.0	0.0	0.0
Disposals	–0.3	–0.1	–0.4	0.0	0.0	0.0
Reclassifications	3.5	1.4	4.9	0.0	0.0	0.0
Acquisition cost at 31.12.2011	51.0	9.8	60.8	5.7	2.3	8.0
Accumulated amortisation at 1.1.2011	28.9	4.5	33.4	3.6	1.3	4.9
Amortisation expense	8.4	2.0	10.4	1.8	0.5	2.3
Impairment losses	0.0	0.0	0.0	0.0	0.0	0.0
Disposals	–0.3	–0.1	–0.4	0.0	0.0	0.0
Accumulated amortisation at 31.12.2011	37.0	6.4	43.4	5.4	1.8	7.2
Net book value at 1.1.2011	13.7	3.4	17.1	2.1	1.0	3.1
Net book value at 31.12.2011	**14.0**	**3.4**	**17.4**	**0.3**	**0.5**	**0.8**

Impairment losses amounting to CHF 2.4 million were recorded in the year under review (prior year: CHF 0.4 million). These impairment losses relate to an ongoing software development project in which the investments have not generated the expected progress on the project. In 2012, software totalling CHF 1.5 million was sourced from related parties (prior year: CHF 0.3 million).

Intangible assets in progress			Total intangible assets		
Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
13.9	3.9	17.8	70.6	16.0	86.6
11.7	3.5	15.2	15.0	4.0	19.0
0.0	0.0	0.0	–0.5	0.0	–0.5
–2.4	–0.5	–2.9	0.3	0.0	0.3
23.2	6.9	30.1	85.4	20.0	105.4
0.4	0.0	0.4	42.8	8.2	51.0
0.0	0.0	0.0	7.7	1.9	9.6
2.4	0.0	2.4	2.4	0.0	2.4
0.0	0.0	0.0	–0.5	0.0	–0.5
2.8	0.0	2.8	52.4	10.1	62.5
13.5	3.9	17.4	27.8	7.8	35.6
20.4	**6.9**	**27.3**	**33.0**	**9.9**	**42.9**

Intangible assets in progress			Total intangible assets		
Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
8.5	2.3	10.8	56.8	12.5	69.3
8.9	3.0	11.9	14.1	3.6	17.7
0.0	0.0	0.0	–0.3	–0.1	–0.4
–3.5	–1.4	–4.9	0.0	0.0	0.0
13.9	3.9	17.8	70.6	16.0	86.6
0.0	0.0	0.0	32.5	5.8	38.3
0.0	0.0	0.0	10.2	2.5	12.7
0.4	0.0	0.4	0.4	0.0	0.4
0.0	0.0	0.0	–0.3	–0.1	–0.4
0.4	0.0	0.4	42.8	8.2	51.0
8.5	2.3	10.8	24.3	6.7	31.0
13.5	**3.9**	**17.4**	**27.8**	**7.8**	**35.6**

13. Financial investments

Swissgrid holds the following participations, which are recognised in the balance sheet as financial investments (no change from prior year):

		Share capital in CHF m.	Currency	Share of capital in %
CESOC AG	Laufenburg	0.1	CHF	50.0
Capacity Allocation Service Company.eu S.A. (CASC.EU)	Luxemburg (Lux)	3.4	EUR	8.3

The financial investments are measured at acquisition cost less any provisions for impairment, as required.

14. Volume- and tariff-related timing differences

In millions of CHF	Grid utilisation	General ancillary services/ balance energy	Active power loss (Individual ancillary services)	Reactive energy (Individual ancillary services)		Total change in volume- and tariff-related timing differences	Thereof surpluses	Thereof deficits
Balance at 31.12.2010	–9.4	81.4	–53.3	5.6	0.0	24.3	–62.7	87.0
Change in 2011	–2.1	–225.4	–11.8	9.8	0.0	–229.5		
Balance at 31.12.2011	–11.5	–144.0	–65.1	15.4	0.0	–205.2	–220.6	15.4
Change in 2012	67.0	–69.5	–8.8	5.2	1.5	–4.6		
Balance at 31.12.2012	**55.5**	**–213.5**	**–73.9**	**20.6**	**1.5**	**–209.8**	**–287.4**	**77.6**
thereof current portion	0.0	–14.6	–17.6	0.0	0.0	–32.2	–32.2	0.0

Negative figures represent surpluses, and positive figures deficits. Further information on volume- and tariff-related timing differences (function, estimation uncertainties, current legal proceedings) can be found in Notes 1, 2 and 3, on page 38 et seq.

Interest on volume- and tariff-related timing differences for individual ancillary services was charged on a modified basis from that of the prior year: following a directive of ElCom, the Libor rate was no longer used but was replaced by the actual interest rate for current account balances (for interest on procurement costs) or the capital cost rate (for interest on operating costs).

15. Balance sheet items held on fiduciary basis

On the basis of a statutory mandate, Swissgrid coordinates the auctioning of bottleneck capacities in the case of cross-border supplies and within the scope of this activity, maintains accounting records and bank accounts on a fiduciary basis.

Fiduciary assets

In millions of CHF	31.12.2012	31.12.2011
Trade accounts receivable	11.0	12.0
Other receivables	0.2	0.2
Accrued receivables and prepaid expenses	0.2	0.0
Cash and cash equivalents	230.3	122.6
Total	**241.7**	**134.8**

Fiduciary liabilities

In millions of CHF	31.12.2012	31.12.2011
Trade accounts payable	0.1	0.4
Other liabilities	0.0	0.5
Accrued expenses and deferred income	241.6	133.9
Total	**241.7**	**134.8**

The revenues and the manner in which they are used may be analysed as follows:

In millions of CHF	2012	2011
Share of revenue Switzerland	156.8	97.8
Auction expense Swissgrid and third parties	–6.0	–6.8
Net proceeds	150.8	91.0
Reduction of the allowable costs of the transmission system	–40.0	–40.0
Undistributed residual proceeds	110.8	51.0

At the time of preparing these financial statements, ElCom had not yet issued any ruling as to the utilisation of the residual proceeds of 2012. As regards 2011, it was ruled that the residual proceeds were at the disposal of the previous owners of the transmission system, but only for expenditures for transmission system projects arising in the period from 1 July 2012 to 31 December 2012.

The residual proceeds for 2009 and 2010 have also not yet been paid out. As regards 2009, proceedings are still pending with the Federal Administrative Court. On the basis of a legally binding ElCom ruling, the residual proceeds of 2010 can be utilised by Swissgrid for expanding the transmission system from 2013 onwards.

16. Trade receivables

In millions of CHF	31.12.2012	31.12.2011
Trade receivables	174.9	205.2
Specific valuation allowances	–0.4	0.0
	174.5	**205.2**

17. Other receivables

In millions of CHF	31.12.2012	31.12.2011
Security deposits on blocked bank accounts	1.4	1.7
	1.4	**1.7**

18. Prepaid expenses and accrued income

In millions of CHF	31.12.2012	31.12.2011
Accrued revenue for supplies made	54.3	40.5
Other	0.7	0.0
	55.0	**40.5**

19. Provisions

In millions of CHF	Employee incentive plan
Balance at 31 December 2010	0.6
Provisions raised	0.7
Provisions used	0.1
Balance at 31 December 2011	1.2
Provisions raised	0.8
Provisions used	0.0
Balance at 31 December 2012	**2.0**
thereof short term	0.8

20. Current financial liabilities

In millions of CHF	31.12.2012	31.12.2011
Bank loans	0.0	28.0
	0.0	**28.0**

The committed lines of credit were re-defined and aggregate CHF 325 million following the transfer of the transmission system which was completed on 3 January 2013.

21. Other liabilities

In millions of CHF	31.12.2012	31.12.2011
Social deposits and value added tax	3.1	7.0
Security deposits on blocked bank accounts	1.1	0.9
Other	1.1	0.6
	5.3	**8.5**

22. Accrued expenses and deferred income

In millions of CHF	31.12.2012	31.12.2011
Accrued expenses for supplies received	59.3	48.9
thereof refund of residual costs to plants ≥ 50 MW arising in 2009/2010	10.3	24.9
Personnel expenses and employees' insurance scheme	8.4	6.9
Income taxes	3.5	1.9
	71.2	**57.7**

23. Contingent liabilities

Guarantees issued

Swissgrid issues formally risk guarantees for geothermal projects of an aggregate amount of CHF 32.9 million (prior year: CHF 8.8 million). The guarantees are issued in favour of Sankt Galler Stadtwerke (CHF 24.1 million) and AGEPP SA (CHF 8.8 million). Economically, they are borne by the CRF Foundation and, as such, are disclosed in its financial statements. The CRF Foundation operates independently from Swissgrid; it fulfils a separate statutory mandate in the field of promoting renewable energy and for this reason, is economically responsible for these guarantees.

24. Other off-balance-sheet commitments

Grid costs

Until the transfer of the transmission system, Swissgrid had to compensate the owners for their chargeable operating and capital costs. The costs were determined by ElCom. The rulings of ElCom for 2009–2012 were appealed against by several parties to the proceedings to the Federal Administrative Court. For the reason, as of the balance-sheet date, no definitive cost information can be specified. In its financial statements, Swissgrid has recorded the grid costs for each year as were laid down in the rulings. The following table shows the costs reported by the transmission system owners and the figures stipulated by the Regulator.

In millions of CHF	Submitted costs	Ruled costs
2009	417.4	328.4
2010	398.5	318.9
2011	341.6	292.3
2012	339.1	300.5
	1,496.6	**1,240.1**

Any subsequent changes to the compensation amount are taken into account in the annual tariff calculation and will be reflected in costs in the subsequent accounting period. They do not have any impact on Swissgrid's results. The same procedure is also applicable prospectively for those transmission system companies, the ownership of which was not transferred to Swissgrid as of 3 January 2013.

CASC.EU

As a shareholder in CASC.EU, Swissgrid is contractually obliged to assume their share of the annual costs.

Long-term rental contracts

Long-term rental contracts with fixed terms exist with several parties. These result in the following commitments:

In millions of CHF	Year 1	Year 2–6	Total
31.12.2012	2.7	3.3	6.0
31.12.2011	3.2	3.0	6.2

Off-balance-sheet lease commitments

Swissgrid has the following off-balance-sheet lease commitments for vehicles and office equipment:

In millions of CHF	Year 1	Year 2–4	Total
31.12.2012	0.3	0.3	0.6
31.12.2011	0.3	0.5	0.8

25. Employee pension plan

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	Accrued contributions	Pension benefit expenses within personnel expenses	
In millions of CHF	31.12.2012	31.12.2012	31.12.2011			2012	2011
Discretionary retirement benefit fund ("patronale Stiftung")	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Pension fund without shortfall/surplus funding (PKE)	0.0	0.0	0.0	0.0	4.3	4.3	3.3
Total	**0.3**	**0.0**	**0.0**	**0.0**	**4.3**	**4.3**	**3.3**

The coverage ratio of the collective pension fund Pensionskasse Energie (PKE) which is maintained as a defined-benefit scheme and which was rolled forward to 31 December 2012, was 106.3% (prior year: 102.0%). The technical interest rate which used to determine the coverage ratio was 4.0%, as in the prior year.

There were no employer contribution reserves in 2011 and 2012.

26. Transactions with related parties

Transactions in millions of CHF	2012	2011
Operating activities		
Net turnover	342.4	498.9
thereof grid utilisation	204.8	263.6
thereof general ancillary services (AS)/balance energy	87.5	170.7
thereof active power loss (Individual AS)	40.7	63.9
thereof reactive energy (Individual AS)	1.6	0.7
thereof balance groups	7.8	0.0
Other operating income	1.3	1.2
Operating expenses		
Cost of procurement	446.7	545.5
thereof grid utilisation	211.6	258.6
thereof general ancillary services (AS)/balance energy	225.9	253.4
thereof active power loss (Individual AS)	6.7	27.4
thereof reactive energy (Individual AS)	2.5	6.1
Material and third-party supplies	2.8	0.4
Other operating expenses	2.5	2.9
Financial result		
Financial expenses	0.3	0.3

Unsettled balances at balance sheet date in millions of CHF	2012	2011
Assets		
Trade accounts receivable	107.9	146.0
Prepaid expenses and accrued income	23.3	18.4
Liabilities		
Trade accounts payable	22.2	42.5
Accrued expenses and deferred income	47.3	22.7
Disclosures pursuant to Art 663a CO		
Trade accounts receivable from shareholders	108.0	136.2
Trade accounts payable to shareholders	22.7	42.8

The conditions for related party relationships are defined in Note 1 on page 41.

27. Risk assessment

The company-wide risks of Swissgrid are identified, the development of risks already being monitored are evaluated and the results of previous corrective measures taken are determined as part of a multi-level process conducted each six months. On this basis, current risks are evaluated as to their probability of occurrence and impact. Those risks that are judged to be significant are avoided, mitigated or transferred through related measures taken by the Board of Directors.

28. Post-balance-date events

Transfer of transmission system

On 3 January 2013, Swissgrid acquired 17 grid companies and thus became the owner of the overwhelming majority portion of the Swiss transmission network.

In this connection, the share capital of CHF 15 million was increased to CHF 264.9 million. The issuance price was CHF 558.3 million. 30% of the purchase consideration of CHF 1.86 billion was settled through Swissgrid equity shares and 70% through loans, less short-term, non interest-bearing liabilities.

The financing of the loans took place, inter alia, through convertible shareholder loans and the issuance of bonds. Conditional capital of a maximum amount of CHF 130 million was created for the convertible shareholder loans. Furthermore, Swissgrid placed two bond issues on the capital market on 16 January 2013. The coupon rate of the 12-year tranche (CHF 350 million) is 1.625% and that of the 7-year tranche (CHF 350 million), 1%.

At the time of reporting, the final transaction value is not definitively known; it depends, inter alia, on the outcome of decisions by the Swiss courts in connection with the relevant proceedings and of possible purchase-price adjustments, as contractually agreed.

In addition, it still remains to be clarified at the present time whether power station spur lines are part of the transmission system. Furthermore, ewz Übertragungsnetz AG and other parts of the network have not yet been transferred.

Change in status of pension fund

On 12 March 2013 (end of voting period), the employees of Swissgrid followed the decision of the Board of Directors and gave their consent to the conversion of the pension fund from a defined-benefit to a defined-contribution pension scheme. The change in status will occur on 1 April 2013.

In order to finance the change, Swissgrid will make available an employer contribution of a maximum CHF 23 million and will record the contribution as a charge to the 2013 financial statements, whereby the actual settlement thereof will be spread over the period from 2014 through 2016. In a letter dated 11 March 2013, ElCom, as the regulatory authority, has

confirmed that the contribution will constitute allowable operating costs in accordance with Art. 15 StromVG provided that the employees are necessary for efficient business performance. The change-over to a defined-contribution pension fund has thus no impact on Swissgrid's results.

There are no further events subsequent to the balance-sheet date which would require to be reflected in the 2012 annual financial statements.

On 20 March 2013, the Board of Directors of Swissgrid AG approved the 2012 financial statements for submission to the Annual General Meeting of shareholders.

Proposed appropriation of retained earnings

The Board of Directors proposes to the Annual General Meeting that the retained earnings for 2012 be appropriated as follows:

CHF	2012	2011
Balance carried forward from the previous year	18,453,525.33	9,956,834.14
Net profit for the year	9,831,679.67	9,615,191.19
Retained earnings	28,285,205.00	19,572,025.33
Appropriation to the General Reserve	492,000.00	481,000.00
Dividend payment	621,000.00	637,500.00
Balance to be carried forward	27,172,205.00	18,453,525.33
Total appropriation	**28,285,205.00**	**19,572,025.33**

The dividend of 4.14% corresponds to the weighted average cost of capital for the operating assets for 2012, which was determined in accordance with legal requirements (prior year: 4,25%).

Laufenburg, 20 March 2013

On behalf of the Board of Directors:
Adrian Bult, Chairman

Report of the Statutory Auditor

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

Swissgrid Ltd, Laufenburg

As statutory auditor, we have audited the financial statements of Swissgrid Ltd, as presented on pages 34 to 69, which comprise the income statement, balance sheet, cash flow statement, statement of changes in equity and notes for the year ended 31 December 2012.

Board of Directors' Responsibility

The board of directors is responsible for the preparation and fair presentation 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 and fair presentation 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 and fair presentation 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 2012 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.

Without qualifying our opinion we draw attention to note 3 (page 42 to 45) to the financial statements, which describes a material uncertainty regarding pending litigations.

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 the financial statement 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

Patricia Chanton
Licensed Audit Expert

Basel, 20 March 2013

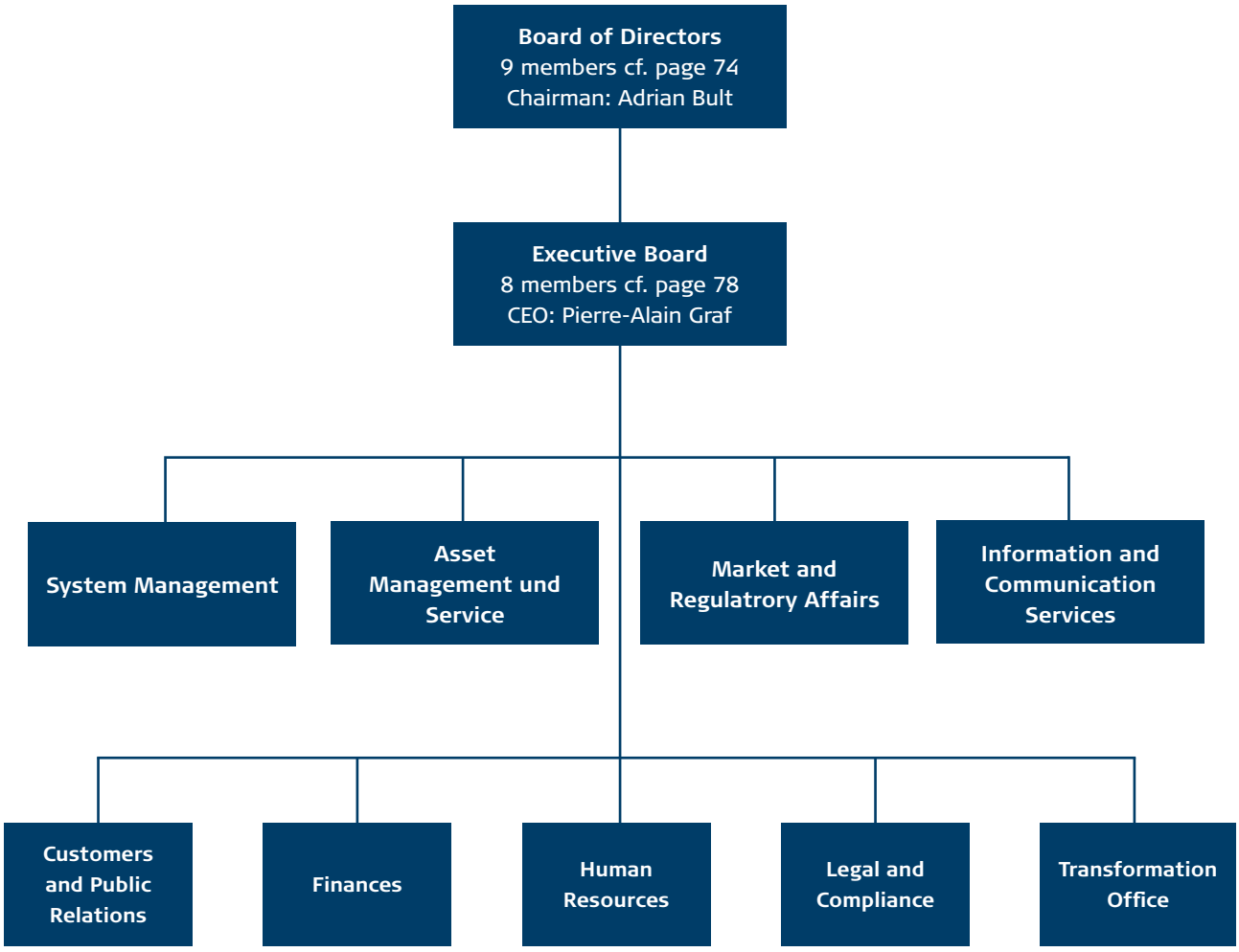
Corporate Governance

The Board of Directors and the Executive Board of Swissgrid Ltd (hereinafter Swissgrid) put 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 2012, unless specified otherwise.

1 Group structure and shareholders

1.1 Corporate structure

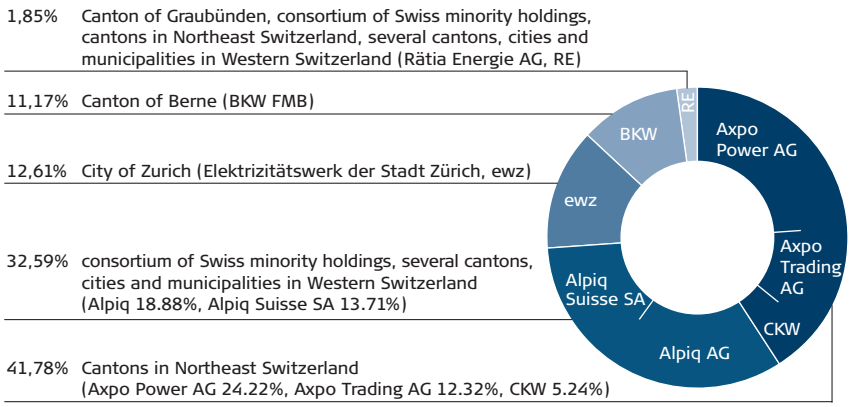
The operational structure of Swissgrid is shown below:



The shareholdings of Swissgrid are listed in the Notes to the Financial Statements. The financial statements are listed on page 60.

1.2 Shareholders

As at 31 December 2012, Swissgrid is wholly owned by the Swiss electricity companies Alpiq AG, Alpiq Suisse AG, Axpo AG, Axpo Trading AG, BKW FMB Energie AG (BKW), Centralschweizerische Kraftwerke AG (CKW), Elektrizitätswerk der Stadt Zürich (ewz) and Repower AG (RE). The companies are directly or indirectly majority-owned by the cantons and the municipalities. The capital increase on 3 January 2013 increased the number of shareholders by nine additional electricity supply companies. The current shareholder structure can be viewed online (www.swissgrid.ch).



1.3 Cross shareholdings

There are no cross shareholdings.

2 Capital structure

2.1 Capital and restriction on transferability

The paid-up share capital amounts to 15 million francs, divided into 15 million registered shares, each with a par value of 1 franc. There is no authorised or conditional capital.

A capital increase of 249,980,449 francs, divided into 249,980,449 registered shares each with a par value of 1 franc, was completed on 3 January 2013 in connection with the grid takeover.

On 3 January 2013 conditional share capital of a maximum of 130 million francs was created and divided into 130 million registered shares each with a par value of 1 franc for the issue of convertible shareholder loans. Conversion rights must be exercised over a maximum of 20 years. Shareholder purchase rights are excluded. Shareholder advance subscription rights are also excluded, as the convertible bonds are financing the takeover of integrated grid companies or the simple and rapid improvement of Swissgrid's capital resources.

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 preemption 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 no options were issued.

2.2 Capital changes

Further information on the share capital and capital changes in the last two years is shown in the Statement of changes in shareholders' equity on page 37.

3 Board of Directors

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

	Name, nationality, function, qualification	Date of election to the Board of Directors	Professional experience, career progression	Additional activities and affiliations	Committee member
	**Adrian Bult** (1959, CH) Chairman (since 10 December 2012), independent member Lic. oec.	14 December 2006	COO of Avaloq Evolution Ltd (2007 to 2012); previously CEO of Swisscom Mobile Ltd and CEO of Swisscom Fixnet Ltd as well as a member of the Executive Board of IBM Switzerland	The Board of Directors of Swissquote Holding AG, Enkom AG, AdNovum AG, Alfred Müller AG and Regent AG; Board of the Gesellschaft für Marketing, Chairman of the CRF Foundation	Chairman of the Strategy Committee, member of the Staff and Compensation Committee, Chairman of the Steering Committee for the GO! project (transfer of the transmission system)
	**Doris Russi Schurter** (1956, CH) Vice Chairwoman (since 10 December 2012), independent member Lic. iur., lawyer	11 December 2007	Lawyer in own practice, Burger & Müller (since 2005); previously partner at KPMG Switzerland and head of KPMG Lucerne	Vice Chairwoman of the Board of Directors of Helvetia Holding AG, member of the Board of Directors of the Luzerner Kantonalbank AG and LZ Medien Holding AG; Chairwoman of the Arbitration Committee at the Chamber of Industry and Commerce for Central Switzerland (IHZ)	Chairman of the Finance and Audit Committee
	**Thomas Burgener** (1954, CH) Board of Directors, cantonal representative Lic. iur., lawyer and notary	14 December 2006	Office for Political and Legal Counselling (since May 2009); previously State Councillor, Canton of Valais, National Councillor, independent lawyer and notary	Board member of the Alpine Initiative	Chairman of the Staff and Compensation Committee
	**Marcel Frei** (1959, CH) Board of Directors, industry representative Accounting and controlling expert (Federal Diploma)	10 December 2012	Director of ewz (since 2012); previously CFO and deputy Director at ewz	Board of Directors for companies affiliated with ewz and for various companies in the energy sector.	Member of the Finance and Audit 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 and foundation boards of Axpo Group companies and foundations and in the Boards of Directors of Kuoni Reisen Holding AG and Notenstein Privatbank AG; foundation board of the Hasler Foundation, Chairman of swisselectric and Board member of economiesuisse	Member of the Strategy Committee

	Name, nationality, function, qualification	Date of election to the Board of Directors	Professional experience, career progression	Additional activities and affiliations	Committee member
	**Isabelle Moret** (1970, CH Board of Directors, independent member Lic. iur., LL.M., lawyer	10 December 2012	Lawyer at own law firm	National Councillor, Vice Chairwoman of FDP Switzerland; foundation board of the ECA-RP pension fund, Board member Retraites populaires	Member of the Staff and Compensation 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	Member of the Swiss delegation for a Swiss-EU agreement on electricity (cantonal representative); Chairman of the Board of Directors of the Grisons psychiatric services	Member of the Strategy Committee
	**Suzanne Thoma** (1962, CH) Board of Directors, industry representative Dr sc. techn. ETH	24 May 2012	CEO BKW (since 1 January 2013), previously the Head of the Grid Division at BKW and in managerial positions for Wicor Holding AG, Rolic Technologies Ltd and Ciba Spezialitätenchemie AG	VR Schaffer Holding AG, member and Chairwoman of the Board of Director of various BKW Group companies; Board member of the Swiss Academy of Engineering Sciences	Member of the Finance and Audit Committee
	**Michael Wider** (1961, CH)) Board of Directors, industry representative Lic. iur., MBA	30 June 2009	Head of Energy Switzerland, 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 board of swisselectric and VSE	Member of the Strategy Committee

Departures in the reporting period:

- Peter Grüschow, Chairman, on 10 December 2012
- Conrad Wyder, Vice Chairman, on 10 December 2012
- Otto E. Nägeli, on 24 May 2012
- Patrick Mariller (Alpiq), on 10 December 2012
- Dieter Reichelt (Axpo), on 10 December 2012
- Kurt Rohrbach (BKW), on 24 May 2012

3.2 Election and term of office

The Board of Directors is comprised of 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. As a rule,the Board of Directors is elected 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 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 seven times in the last financial year and held nine teleconferences.

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 four times during the last financial year.

Finance and Audit Committee

The Finance and Audit Committee supports the Board of Directors in its supervisory role, i.e. 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 on-going 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 five times in the last financial year and held one teleconference.

Staff and Compensation Committee

The Staff and Compensation Committee draws up policies for 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. The basis for this decision is the compensation concept approved by the Board of Directors. The committee presents its view on the changes to the Executive Board that are proposed by the CEO. It also ensures that succession planning is in place for the Board of Directors and the Executive Board. The Staff and Compensation Committee met four 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:

- at Board of Directors' meetings, the Executive Board presents and comments on business performance and submits all important issues for discussion or resolution.
- the report to the Board of Directors is compiled quarterly, and contains key figures on business performance together with comments from the Executive Board.
- the written CEO report is submitted at every ordinary Board of Directors meeting and also deals with recurring issues, such as the AS reports, grid expansion projects and key performance indicators (KPI).
- additional periodically recurring Board of Director information instruments are the risk report and the reports on developments in the energy sector in Switzerland and Europe.
- the external auditors issue an annual written report for the Board of Directors (see also the lists in section 7.2 on page 79).

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. For example, in 2012 the Board of Directors issued a new code of conduct and a whistleblowing policy for all employees as an over-arching measure. The internal operational controls are integrated in the operating procedures, which means that they are implemented while work is being carried out or take place immediately before or after the procedure. Internal checks do not come under a separate ICS function, but are integrated into the processes. The ICS at Swissgrid, which focuses 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 evaluated and the results of previous measures are determined as part of a multi-level process conducted twice a year. 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, mitigated or transferred through corresponding measures determined by the Board of Directors. Risk management is coordinated and documented by an internal specialist department.

Internal audit

The appointment of an internal audit division was resolved in the year under review and its integration initiated. The division head was appointed so that the internal audit division would be able to commence its operational activities in 2013.

From left to right: Andreas John, Beatrice Brack, Andy Mühlheim, Pierre-Alain Graf, Wolfgang Hechler, Luca Baroni, Bettina von Kupsch, Thomas Tillwicks

4 Executive Board

4.1 Members of the Executive Board, additional activities and affiliations

Name, nationality, function, qualification	Member of the EB since	Professional experience, career progression	Additional activities and affiliations
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 and I) Finance Certified economist	15 December 2006	CFO of Etrans AG (2005 to 2006); previously CFO of Energiedienst Holding AG and EGL AG, WATT AG and Migros Genossenschaftsbund	None
Beatrice Brack (1960, CH) Human Resources Lic. oec. HSG	1 November 2012	Head of Human Resources at Swisscom Switzerland Ltd (2008-2012), previously Head of Human Resources at Swisscom Mobile AG, HR Director Sunrise AG and for Reader's Digest Switzerland and Rank Xerox	None
Wolfgang Hechler (1967, D) Asset Management and Service Degree in Electrical Engineering	1 March 2010	Vattenfall Europe Distribution GmbH (2002 to 2010), most recently as head of grid strategy; previously at Hamburgische Electricitäts-Werke AG	None
Andreas John (1970, D) System Management Degree in Power Engineering	1 March 2010	At Swissgrid since 2007, most recently as Head of Grid Operations; previously at ABB Group, Siemens Group, Enermet Group and CKW AG	None
Bettina von Kupsch (1963, D) Customer and Public Relations Dipl. Kaufmann, Master of Arts	1 April 2010	Swisscom Switerzland Ltd as Head of Brand Management & Transfer (2008 to 2009), previously in management positions at Swisscom Mobile, Cap Gemini Ernst & Young and Gemini Consulting	None

Name, nationality, function, qualification	Member of the EB since	Professional experience, career progression	Additional activities and affiliations
Andy Mühlheim (1968, CH) Information & Communication Technology Services Degree in Electrical Engineering HTL, Degree in Industrial Engineering STV/FH, Lorange Executive MBA	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) Market and Regulation Degree in Electrical Engineering	15 December 2006	Head of Commercial Grid Management at Etrans AG (2005 to 2006); previously at Atel AG and in electricity supply in Berlin	Board of Directors of Capacity Allocation Service Company.eu S.A.; active on international committees in the European Association of Transmission System Operators ENTSO-E

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 (including 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 Executive Board and the Board of Directors are disclosed on pages 54 and 55 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, act as the statutory 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 this 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 176,000 for the last financial year. Additional services provided in connection with the transfer of the transmission system and its financing (in particular taxation due diligence, review of the mid-year financial statements and audit of the capital increase report) and translation activities were remunerated to the amount of CHF 302,000.

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.

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