

swissgrid

# Annual Report 2016





SWISSGRID'S MISSION

"We are building the transmission grid of the future and operating it reliably, efficiently and free of discrimination to serve the Swiss economy.

Together with our partners from Switzerland and abroad, we use market-based solutions to further develop the energy system.

Safety is the top priority in everything we do."



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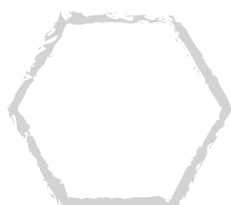
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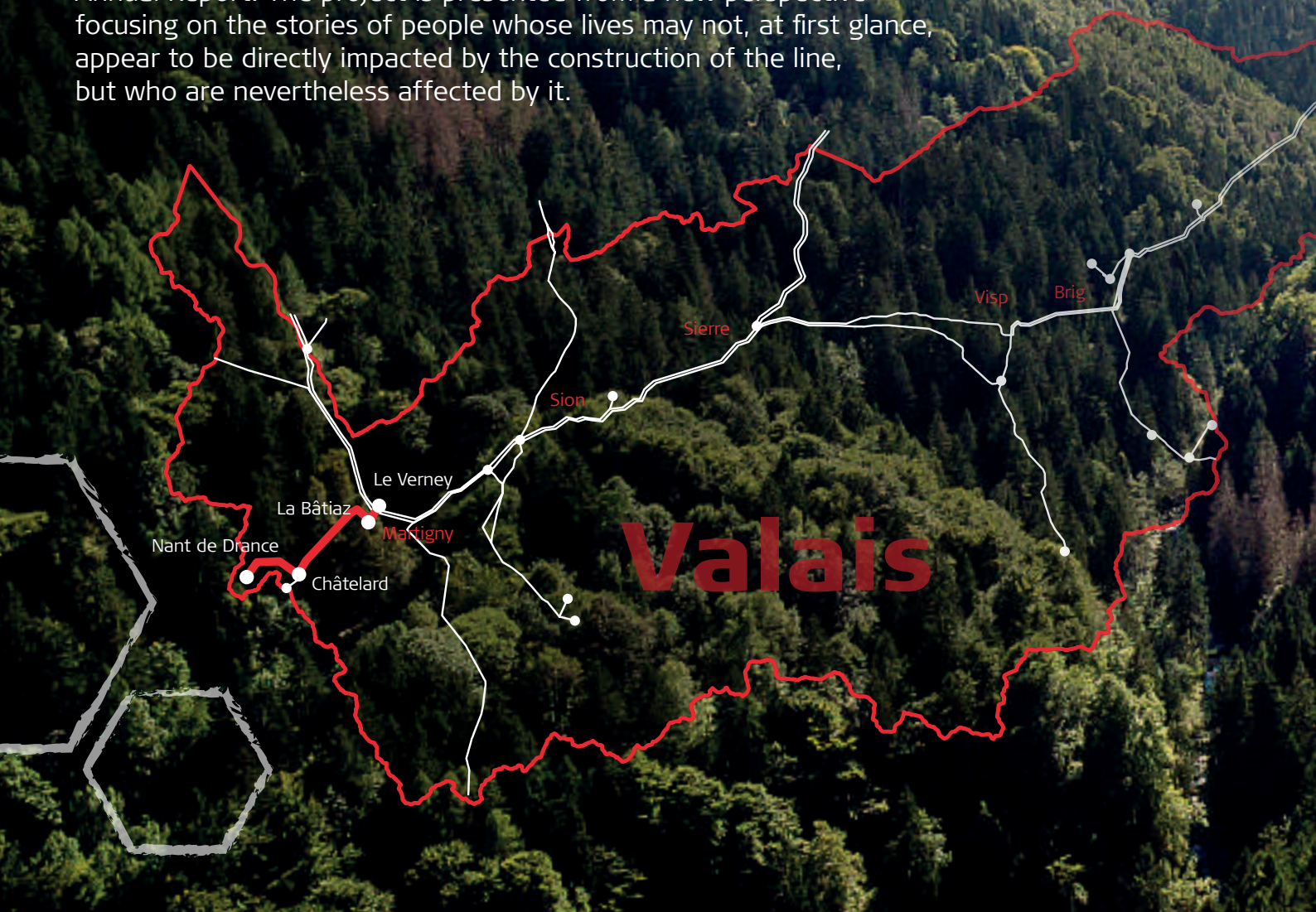
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# Nant de Drance

The grid connection for the pumped storage power plant Nant de Drance in Wallis is an important grid construction project for Swissgrid. In future, Nant de Drance will produce up to 900 megawatts of power in its two reservoirs Émosson and Vieux Émosson. Swissgrid's new, approximately 20 km long 380 kV line ensures that this energy can be transported to Switzerland's major consumption centres. In 2016, Swissgrid made great strides in the construction work on the two line sections between the substations Nant de Drance, Châtelard and La Bâtiaz. In December 2016, the Federal Inspectorate for Heavy Current Installations approved plans submitted by Swissgrid for an underground cable connection along the final line section between La Bâtiaz and Le Verney.

That challenging construction project is the main focus of this year's Annual Report. The project is presented from a new perspective – focusing on the stories of people whose lives may not, at first glance, appear to be directly impacted by the construction of the line, but who are nevertheless affected by it.





# At a glance

Swissgrid is the national grid company. As the owner of Switzerland's extra-high-voltage grid, it is responsible for the safe operation of the grid without discrimination, and for maintaining, modernising and expanding the grid efficiently and with respect for the environment.

Swissgrid employs over 450 highly qualified people from 24 countries at its sites in Frick, Laufenburg, Uznach, Landquart, Ostermundigen, Prilly and Castione. 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. Several Swiss electricity companies hold the majority of Swissgrid's share capital.

**7**  
locations

**12,000**  
electricity pylons

**141**  
switching  
substations

## Financial figures 2016\*

(in million CHF)

Total operating income	1,266.2
Procurement costs	767.3
Operating expenses incl. depreciation/ amortisation and impairment losses	340.9
Earnings before interest and taxes (EBIT)	158.0
Net income	91.9
Balance sheet total**	3,498.9
Free cash flow	506.5

\* Swiss GAAP FER numbers | \*\* Excluding balance sheet items held on a fiduciary basis



**12,000**  
inspections p.a.

**6,700** km  
lines

**41**  
connections  
abroad

**825<sub>m</sub>**  
streams and canals

Olivier Duckert  
Environmental expert, Grenat Sàrl





The construction of a line has a major impact on the environment. For this reason, each construction project is subject to environmental monitoring: independent environmental offices keep an eye on the activities to ensure compliance with environmental guidelines. The project's adherence to legal environmental protection regulations is already verified during the planning phase. The environmental compatibility report includes recommendations on what alternative measures need to be implemented to minimise the impact on the environment.

Among other things, 825 metres of streams and channels were restored to compensate for the grid connection of the power plant Nant de Drance in the Saxon region. This created new living space for plants endangered in Wallis, such as the common bur-reed or blue water-speedwell, but also for animals such as the protected European beaver and threatened river crayfish.



# Consolidation and new beginnings in the anniversary year

## DEAR READERS,

2016 was an important year for Swissgrid. Ten years ago, on 15 December 2006, the company took on the responsibility for the operational management of the Swiss transmission grid. Since then, the National Grid Company has undergone a radical transformation – from being the operator to the owner with end-to-end responsibility. Swissgrid makes an important contribution to security of supply in Switzerland. The reporting year illustrated the role of Swissgrid: the fraught energy and grid situation in the winter of 2015/2016, the debate surrounding the energy strategy 2050 and the referendum on the nuclear power phase-out of 27 November 2016 all focused the public's attention on the national grid company.

These events generated plenty of discussion in the media, industry and politics. Swissgrid seized the opportunity provided by these circumstances to enhance the cooperation between the various players, highlight the need to expand the transmission grid and initiate specific measures. It took an active part in working groups alongside industry representatives, the Swiss Electricity Commission ElCom and the Swiss Federal Office of Energy (SFOE) to manage and deal with the aftermath of the tense winter situation. In addition, Swissgrid, the Association of Swiss Electricity Companies (VSE) and the Association of Swiss Distribution System Operators (DSV) presented the positions of the electricity sector to the Committee for Environment, Regional Planning and Energy of the Council of States (UREK-S) during its consultations on the grid strategy.

Changes in the European and Swiss power market, energy policy, the regulatory framework conditions and technological progress affected the operation of the Swiss transmission grid. Consequently, Swissgrid must constantly keep pace with developments in order to guarantee continued security of supply. Following the rapid development of the first few years and the assumption of responsibility for expanding and maintaining the grid in 2013, the time has now come for consolidation. This next phase began with the appointment of Yves Zumwald as CEO in March 2016. He had already been in charge of the company on an interim basis since September 2015.

In future, Swissgrid will concentrate on four core tasks. *Safety and security* have the highest priority for the company. The aim is continuous improvement in protecting our staff, our installations and our IT infrastructure. Swissgrid is introducing a new control system to support the important corporate goal – the long-term *maintenance of the security of supply* and secure grid operation. This permits central management of all switching substations be-



Yves Zumwald, Adrian Bult

longing to the transmission grid in Switzerland from the two control centres in Laufenburg and Prilly. By the end of 2017, Swissgrid will be able to switch most of the substations itself and supersede the old system. Furthermore, the company is focusing on improving its *efficiency and effectiveness*. For example, measures are ongoing to cut operating costs. Another priority for Swissgrid is implementing the proposals set out in "*Strategic Grid 2025*". The planned expansion project urgently needs to be realised to enable the grid to master the new challenges. In addition, Swissgrid is developing grid- and market-oriented solutions together with the industry to achieve optimal grid capacity utilisation.

By concentrating on the essentials, Swissgrid has established a solid foundation for meeting future challenges. At the same time, the company's relocation from Fricktal to the new office building in Aarau is imminent. The move to the new premises in mid-2018 will not only bring us closer together as a company, but also closer to our customers, our partners and other stakeholders.

Adrian Bult  
Chairman of the Board of Directors

Yves Zumwald  
CEO



**1,113** m<sup>2</sup>  
final forest  
clearing

**2,838** m<sup>3</sup>  
felled timber

Foresters make a vital contribution to the grid connection by clearing a way through the thick forest terrain for the construction of lines and pylons. In total, they had cleared an area of 8,987 m<sup>2</sup> by the end of 2016. Of this, 7,874 m<sup>2</sup> will be given over to the forest again after completion of the construction work. Most of the felled trees, so-called deadwood, will be left where it is and provide a valuable habitat and nutrition in the form of biomass for various organisms in the forest ecosystem.

The pathways cleared for the extra-high-voltage pylons, a total of 19 hectares, have an impact on the local forest dynamics. There is more insolation, which permits new kinds of plants to take root and grow. At the same time, this creates new habitats for animal and insect species. Thanks to their cautious intervention, the foresters make a valuable contribution to the preservation and promotion of biodiversity, for example, by not clearing all trees simultaneously and deliberately sparing particular kinds of timber.



Yvon Rouiller  
Forester, Martigny Forest Service – Trient Valley



# Review

IN THE PAST YEAR SWISSGRID CONCENTRATED ON SECURE AND EFFICIENT OPERATION, THE RENEWAL AND EXPANSION OF THE EXTRA-HIGH-VOLTAGE GRID AND THE DEVELOPMENT OF MARKET-BASED SOLUTIONS FOR THE FUTURE ENERGY SYSTEM.

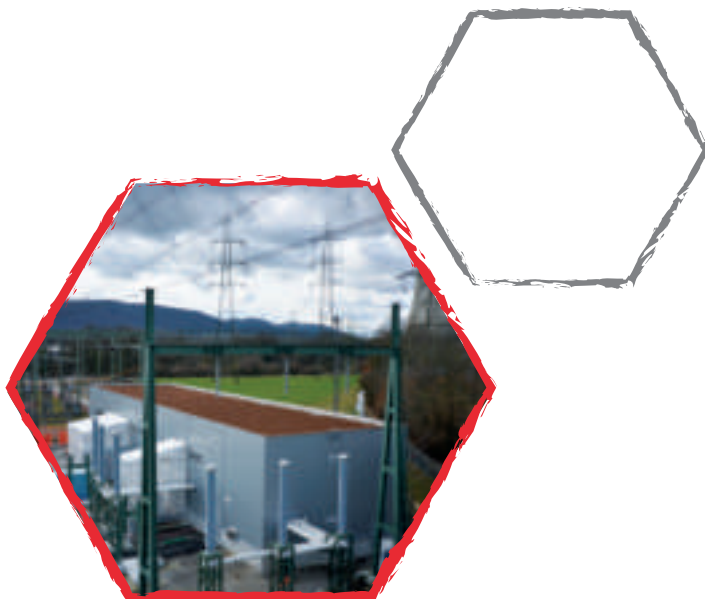
The newly formed management committee put its stamp on the 2016 financial year in no uncertain manner. Yves Zumwald, who was confirmed as CEO after his six-month interim leadership, determined the priorities for the National Grid Company together with the Executive Board. These comprise the ongoing enhancement of company security, the long-term maintenance of security of supply, boosting efficiency and implementing the projects planned as part of "Strategic Grid 2025." In terms of organisation, the new "Technology" business unit was created to help achieve these priorities. This division will expedite the digitalisation of business processes and the resulting transformation of the company. Further organisational adjustments were made to optimise processes and reduce interfaces.

The new Technology division will be led by Rainer Mühlberger, the Executive Board member previously responsible for strategy and business development. Maurice Dierick, already a member of Swissgrid's leadership team, took charge of the Grid division in June following Yves Zumwald's appointment as CEO. Luca Baroni, Head of Corporate Services and Chief Financial Officer, left the company at the end of 2016. The Board of Directors appointed Doris Barnert as his successor. She will take up her duties on 1 April 2017.

## ADDITIONAL MILESTONES IN GRID TRANSFER

The open legal proceedings initiated in 2011 to assess the value of the transmission grid assets were concluded during the reporting year. The Swiss Electricity Commission ElCom confirmed the evaluation method agreed by the parties for determining the relevant value of the installations. This, together with the takeover of additional transmission grid assets of former owners at the beginning of the year, represented another important milestone in achieving the transformation prescribed by the Electricity Supply Act.

The sale of previous shareholder Alpiq's shares, as announced in 2015, was also concluded during the reporting year. BKW is now the biggest shareholder of Swissgrid with almost 37%. BKW transferred 4.4% of the Alpiq's shares to Sireso, an investment company belonging to the six West Swiss cantons. This transaction led to a further increase in Swissgrid's shareholder base.





## SECURE GRID OPERATION DESPITE EXCEPTIONAL SITUATION

Apart from a minor regional interruption, Swissgrid was able to guarantee the availability of the transmission grid at all times in 2016. However, the fraught energy and grid situation in the winter 2015/2016 illustrated the challenges involved in secure grid operation. In addition to the generally higher demands on security of supply during the winter, energy reserves were low at the end of 2015, due to a concatenation of special circumstances. Swissgrid, in conjunction with the industry and neighbouring transmission grid operators, took grid- and market-related measures that helped to ameliorate the situation. In the light of this situation, Swissgrid also took various measures to avoid a similar situation in the future. For example, in close coordination with Axpo, the procurement of a 380/220 kV transformer for the Beznau substation was accelerated. This transformer can be used in the event of a feed-in failure from the Beznau nuclear power plant and thus increases the import capacity on the Swiss northern border while relieving the burden on existing transformers. In addition, Swissgrid took an active part in a working group headed by the Swiss Electricity Commission ElCom to clarify the roles and responsibilities for security of supply in Switzerland.

During the past year, Swissgrid worked intensively on the introduction of its new grid control system in order to cope with the challenges in grid operation. In future, central control of all switching substations in the Swiss transmission grid will be possible. At the end of 2016, 41 out of a total of 141 substations had already been connected to the new control system. Moreover, in November, Swissgrid was able to deploy a new load frequency controller in so-called parallel operation for the first time. This load frequency controller guarantees that the consumed and generated energy can be balanced at a frequency of 50 Hertz throughout Switzerland at all times.

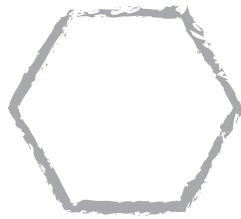
## PROGRESS AND CHALLENGES IN GRID PROJECTS

During the past financial year, Swissgrid made decisive progress in implementing the "Strategic Grid 2025." For example, the construction of the grid connection for the pumped storage power plant Nant de Drance in Wallis is proceeding as planned. This line ensures the transportation of the energy produced in the power plant. The connection between Pradella and La Punt in Engadin is also being reinforced. The increase in voltage from 220 kV to 380 kV improves the security of supply of the Swiss and European transmission grid and enables more reliable supply of electricity to Engadin. Construction work was commenced or successfully concluded in the substations Romanel, Veytaux, Laufenburg, Chandoline, Avegno and Gösgen.

Swissgrid will be able to begin work on the construction of a line between Beznau and Birr in autumn 2017. In July, the Swiss Federal Office of Energy (SFOE) issued the approval the Gäbihübel section - the first-ever partial cabling of a 380 kV grid in Switzerland. At the same time, the SFOE decided that the entire 380 kV line between Mörel and Ulrichen can be realised as an overhead. On behalf of the Federal Court, Swissgrid carried out a feasibility study for partial cabling of the section from Mörel to Ernen and submitted it to the SFOE. In addition, the Federal Council established the planning corridor between Airolo and Lavorgo and the planning areas between All'Acqua and Magadino and between Niederwil and Obfelden.







Some of the other construction projects that form part of the "Strategic Grid 2025" are mired in lengthy approval procedures, in part due to projects like the 380 kV lines between Bickigen and Chippis and Chamoson and Chippis, which are needed for the transport of the Wallis hydropower to the major consumption centres in the Swiss Plateau. In December, the Federal Administrative Court rejected all objections to the proposal approved by the SFOE for the latter project. Realisation of these lines is imperative to ensure that the transmission grid is technically equipped to support a sustainable energy future.

#### OPEN AND TRANSPARENT DIALOGUE WITH THE PARTIES AFFECTED

During the reporting year, Swissgrid made even greater efforts to have direct discussions with affected residents, community representatives, politicians and environmental associations at over 40 different events, personal meetings and trade fairs. Through this open and transparent communication of the planned expansion projects, Swissgrid aims to achieve greater acceptance of the grid projects among the population. Acceleration of the approval procedures related to grid expansion is crucial if the grid infrastructure is to be ready for the future challenges.

Swissgrid also had a higher profile in the political debates of the past year. It actively participated in drafting the legislative bill related to the conversion and expansion of the electricity grids. In the hearings on the electricity grid strategy, Swissgrid was able to present, together with the Association of Swiss Electricity Companies (VSE) and the Association of Swiss Distribution System Operators (DSV), the positions of the electricity industry to the Committee for Environment, Regional Planning and Energy of the Council of States (UREK-S). Moreover, in the run-up to the referendum on the nuclear phase-out initiative, Swissgrid took part in the media conference organised by the Federal Council. Swissgrid made use of the heightened public attention to draw attention to the current and future requirements for secure grid operation.

A shareholder survey conducted in the fourth quarter of 2016 revealed the value of these communication efforts. Swissgrid was able to clearly raise its public profile compared to 2013, improve its image and increase trust.

#### CLOSE TIES WITH THE INDUSTRY – IN SWITZERLAND AND EUROPE

Swissgrid strengthened its contacts with the industry last year. Through the grid forum, an information event on the subject of grid usage, the Dispatcher Day or the User Group Meeting for all balance groups, the company provided several platforms for exchange among the various industry representatives.

In 2016, Swissgrid introduced important innovations for the balance groups. Following a wide-ranging consultation process up to autumn 2016, it aligned the contracts to the current conditions and concluded them anew. At the same time, it carried out comprehensive system modifications, with the processes being made more efficient and customer-friendly and adjusted to European standards. In addition, Swissgrid was able to improve the monitoring of the balance groups and as a result reduce its operational and financial risks.

Swissgrid cultivates close ties with its partners not just in Switzerland, but also abroad. The company cooperates daily with various European transmission grid operators. As part of the European interconnected grid, changes in the European power market directly affect Swissgrid's work. It represents Switzerland's interests in Europe by taking an active part in numerous foreign committees or through its participations. In the past year, among other things, Swissgrid joined the Supervisory Board of JAO S.A, which provides services to the European transmission grid operators in the context of cross-border congestion management.



# Demand for funding

Outside of its core business, Swissgrid handles the applications for cost-covering remuneration for feed-in to the electricity grid (CRF) and one-off remuneration (EIV) on behalf of the government. The amended Energy Act of 2014 stipulates that power generation from renewable energies be increased by at least 5,400 GWh between 2000 and 2030.

The main support for achieving this goal is the cost-covering remuneration for feed-in to the electricity grid scheme introduced in May 2008. This was followed in 2014 by the launch of the one-off payment (EIV) scheme. Under the terms of the EIV scheme, operators of small photovoltaic facilities receive a one-off investment amount.

## GROWING SUCCESS OF THE ONE-OFF PAYMENT

The demand for promotion of renewable energies remains as high as ever. In total, 80,592 funding applications have been submitted to date, including 11,991 new applications in the past year for the CRF and EIV schemes.

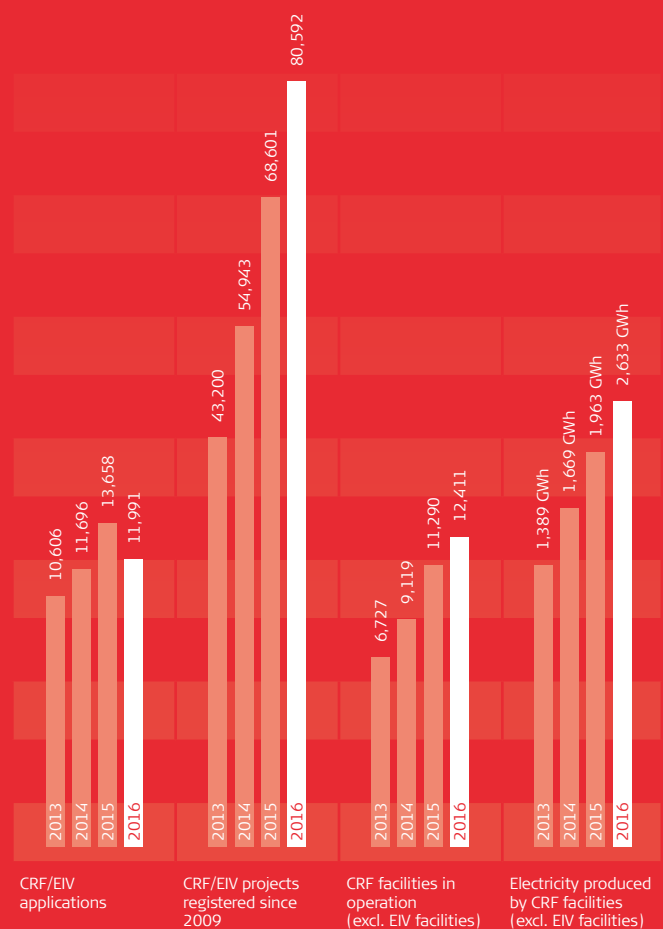
At the end of 2016, a total of 12,411 CRF-funded facilities were in operation. These produced 2,633 GWh electricity a year, corresponding to 4.6% of the annual final electricity consumption of Switzerland. Meanwhile, the importance of the one-off payment is continually increasing. By the end of 2016, 21,340 photovoltaic facilities with an installed peak production of 213 MW had benefited from its introduction. Total funding of about CHF 212.5 million in total has been distributed.

## IMPORTANT POLITICAL DECISIONS

In June 2016, the Federal Council increased the grid supplement for 2017 from 1.3 Rp to 1.5 Rp per kWh. This meant that it was possible to provide, as planned, a funding allocation of around 50 MW for photovoltaic facilities and around 27 MW for other technologies. However, facility operators who apply for the CRF for the first time can no longer be admitted to the funding system under the currently applicable cost ceiling. They have the option of benefiting from the one-off investment amount provided by the EIV.

The new Energy Act (as of the end of 2016) stipulates that Swissgrid's activities in the area of funding renewable energies be transferred to a subsidiary. This is intended to ensure that Swissgrid can focus specifically on its measures to achieve the objectives of Energy Strategy 2050. In 2017, Swissgrid will therefore begin preparing for this possible outsourcing.

## FIGURES



### TOWARDS A POWER MARKET FOR THE FUTURE

Swissgrid would like to play an active role in helping to shape the European and Swiss energy system. For this purpose, it has developed proposals for a new market design with the goal of boosting the efficiency of the power market. Consultations on these proposals were held with the industry up to mid-February 2016, and the feedback was discussed and summarised in a final document. After this, Swissgrid began implementing individual measures - among others, a detailed concept for a real-time based balance energy price was prepared.

Swissgrid continued its commitment for a further opening in the market for ancillary services and as a result for an increase of liquidity. For example, since the start of 2016, the owners of photovoltaic and biomass facilities, who receive the cost-covering remuneration for feed-in to the electricity grid, qualify as providers for tertiary control power at Swissgrid. With its integration of new technologies like batteries or renewable energies in the control energy markets, Swissgrid plays a pioneering role in Europe and serves as an example for other transmission grid operators. At the same time, the existing primary control power cooperation between Germany, the Netherlands, Switzerland and Austria was expanded to include Belgium.

### SWISSGRID'S COVETED EXPERTISE

As the competence centre for the Swiss extra-high-voltage grid, the National Grid Company brings together numerous specialists from various disciplines. This knowledge is also in demand in research. Among other things, Swissgrid participates in the ETH Zurich's project "Hybrid overhead line in Switzerland". The project supports it by providing technical and specialised services and facilitates access to the grid infrastructures. Swissgrid is also cooperating in the "Nano Terra" research project being conducted by the ETH Zurich, the University of St. Gallen and the Swiss Federal Laboratories for Materials Science and Technology (Empa). This project is investigating how the electricity system can be stabilised and regulated by means of building and equipment control.

### ROOFING CEREMONY FOR THE FUTURE SWISSGRID

In 2016, Swissgrid celebrated 10 years of management and responsibility for the Swiss extra-high-voltage grid. At the anniversary gala in mid-December, the employees looked back on past successes and challenges. Swissgrid also began a new chapter last year. The topping-out ceremony for the new headquarters in Aarau took place in November. The current locations in Laufenburg and Frick will be merged in Aarau in mid-2018. The preparations for moving into the new building, which will herald the beginning of a new era for Swissgrid, are therefore the next item on the agenda in the coming year.






**96<sub>h</sub>**  
heavy transport

Yvan Fournier  
Police officer, Valais Cantonal Police

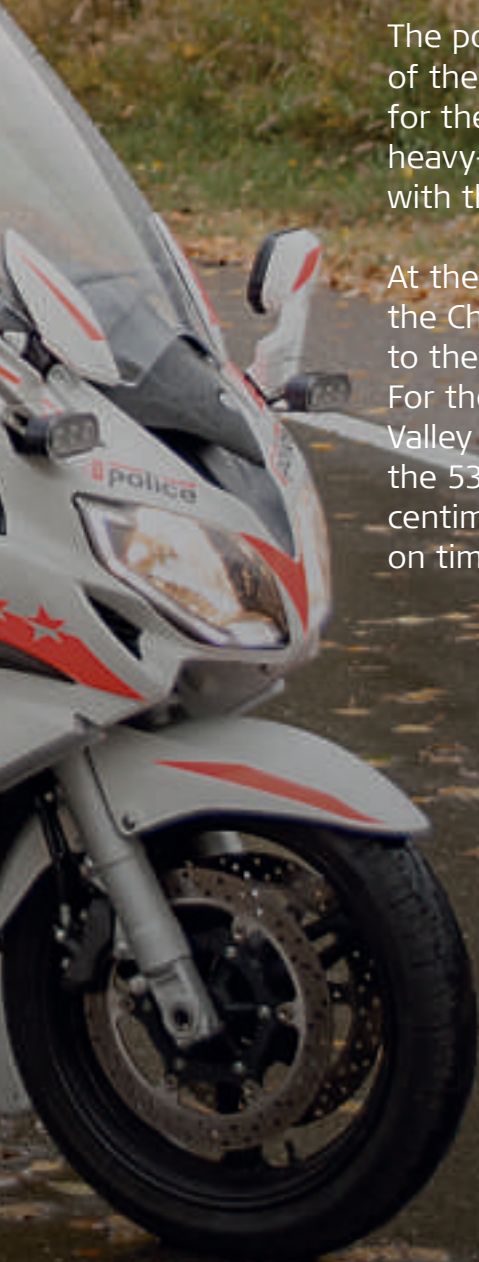


**476<sub>t</sub>**  
total transport  
weight



The police also played an important role during the construction of the connection for the Nant de Drance power plant. The components for the project were transported over long distances by road. The heavy-duty transporters, which were underway in Switzerland for days with their load, had to be accompanied by the police.

At the beginning of July, four 119-ton heavy transformer poles for the Châtelard substation were transported from the Rhine port in Basel to the building site in various overnight stages over a four-week period. For the final stretch, the police closed the only road in the Trient Valley for about four-and-a-half hours. This was the only way of enabling the 53 m-long transport vehicles to navigate the hairpin bends with centimetre precision and deliver the four poles to their destination on time.





# Financial Report

- MANAGEMENT REPORT
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- STATUTORY FINANCIAL STATEMENTS





# Management Report

This Management Report covers both the requirements pursuant to Art. 961c CO (Code of Obligations) in connection with the statutory financial statements as well as the provisions on the «Annual Report» relating to the financial statements in accordance with the Swiss GAAP FER (Swiss GAAP FER framework concept, paragraphs 7 and 34).





# Regulatory Business Model

## LEGAL AND REGULATORY ENVIRONMENT

The electricity industry's value chain can basically be divided into the following areas: electricity generation -> electricity transmission -> electricity distribution -> electricity consumption. As owner and operator of the Swiss extra-high-voltage grid, Swissgrid is responsible for the transmission of electricity.

The high investments for the construction of the transmission system, rising economies of scale (in view of falling marginal costs) and high irreversible costs result in a natural monopoly in the area of electricity transmission. This has been structured as a legal monopoly by the legislator based on the Electricity Supply Act (StromVG) and the Electricity Supply Ordinance (StromVV).

The Federal Electricity Commission (ElCom) oversees compliance with the Electricity Supply Act and the Electricity Supply Ordinance. It is the independent, governmental regulatory authority in the electricity industry and is allowed to issue rulings where necessary, against which there is a right of appeal to the Federal Administrative Court with the possibility of appeal to the Federal Supreme Court.

Given the public interest in the secure national supply of electricity, the resulting legislation and the relevant supervision by the regulator, Swissgrid's business activities are overwhelmingly subject to strict regulation.

## BUSINESS ACTIVITY

As the National Grid Company, Swissgrid is responsible for the non-discriminatory, reliable and efficient operation of the transmission grid as well as its sustainable and efficient maintenance. The renovation and demand-driven expansion of the Swiss extra-high-voltage grid are also considered amongst the company's most important tasks.

Swissgrid also provides additional services, such as balance group and congestion management or ancillary services (AS) as part of the European and Swiss grid operation. In addition to representing national and international interests, Swissgrid makes an important contribution to ensuring the secure supply of electricity for Switzerland.

## «COST-PLUS» REGULATION

Swissgrid's legal mandate and business activities expose the company to costs that can be passed on to the lower grid levels and end consumers in the form of tariff revenues if the regulator deems the costs to be chargeable in accordance with the electricity supply legislation. ElCom performs an ex post review of the chargeability of the costs for Swissgrid.

Chargeable costs include the operating and capital costs of a secure and efficient grid. Chargeable costs also include an adequate operating profit. As a result, this is referred to as a «Cost-Plus» regulation: «Cost» stands for the cost recovery principle and «Plus» stands for the operating profit.

## CHARGEABLE OPERATING AND CAPITAL COSTS

Chargeable operating costs include the costs for services directly related to the operation. Examples include costs for maintaining the grid, costs for providing the ancillary services, personnel expenses, costs for materials and third-party supplies as well as direct taxes.

Chargeable capital costs include depreciation and imputed interest. The amount of imputed interest is directly dependent on the assets required to operate the grid (invested operating assets, IOA) and the applicable regulatory interest rate (WACC).

In particular, the IOA consists of the transmission grid assets (incl. construction in progress), intangible assets, the net current assets determined on a monthly basis and the accumulated volume- and tariff-related timing differences.

**VOLUME-AND TARIFF-RELATED TIMING DIFFERENCES**

Swissgrid calculates the required tariff revenues ex ante based on budgeted costs (operating and capital costs). Volume and price differences between the «actual» situation for a year and the «budgeted» situation for the same year regularly lead to differences between the actual costs and actual income for a year. These differences are referred to as volume- and tariff-related timing differences and are rectified over the coming years.

If effective costs exceed the tariff revenues for the same year, this results in a deficit. This deficit can be eliminated over subsequent years by increasing the tariff. By contrast, if tariff revenues exceed effective costs for the same year, this results in a surplus, which must be used to reduce tariffs over subsequent years.

As part of the invested operating assets, volume- and tariff-related timing differences are also subject to interest at the WACC and so influence the capital costs. Deficits increase capital costs, while these are reduced by surpluses.

**PROFIT REGULATION**

The legal framework in place for Swissgrid means that the EBI (earnings before interest) of the regulated business area is essentially a multiplication of the invested operating assets (IOA) and the capital cost rate (WACC).

Additional, comparatively immaterial profit contributions may arise from Swissgrid's unregulated business area.

The EBI is then used to compensate Swissgrid's stakeholders via interest on borrowed capital and return on equity (dividends and/or profit retention). Cost-Plus regulation therefore leads to a return in the amount of the capital cost rate (WACC).

**IMPUTED CAPITAL COST RATE (WACC)**

The WACC is an imputed interest rate defined annually based on the electricity supply legislation, which applies equally for all grid operators (Swissgrid and distribution grid operators).

The WACC is calculated methodically taking account of the current Best Practice guidelines provided by the Federal Department of Environment, Transport, Energy and Communication (UVEK). The methodology was developed specifically for the regulation of electricity grid operators and intends to ensure security of investment for these operators. With regard to the financing structure, the WACC calculation assumes an equity share of 40% and a borrowed capital share of 60%. Specific thresholds apply for the individual capital cost parameters.

As the WACC represents an imputed interest rate for the entire sector, Swissgrid's actual capital costs are not included in the tariff calculation. On the other hand, this means that Swissgrid is responsible for determining how the imputed interest received via the tariffs is distributed to shareholders and lenders.

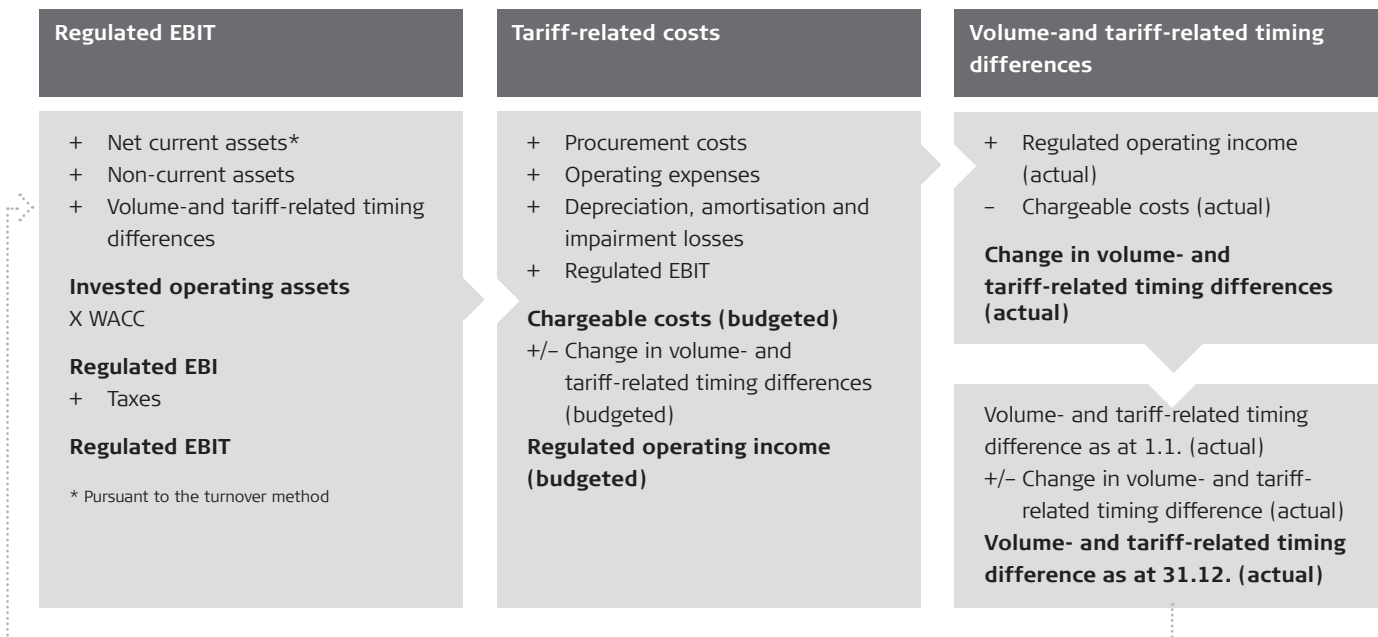


Illustration of the regulatory business model

## Business Performance (values pursuant to Swiss GAAP FER)

### PROCUREMENT COSTS

Procurement costs were significantly affected by the 20 October 2016 ruling issued by ElCom on the method for establishing the assessed value of the transmission system. The ruling was issued in connection with the transfer of the transmission system and all its associated equipment from its previous owners to Swissgrid. The remuneration paid to comply with the ruling increased procurement costs in the grid utilisation segment by CHF 417.4 million in the reporting year. Additional remuneration for operating and capital costs paid to former transmission system owners in this segment was CHF 19.0 million higher than in the same period of the previous year.

In the general ancillary services segment, procurement costs increased CHF 44.8 million year-on-year. This increase was driven by higher provision costs due to the strained energy and grid situation in the 2015/2016 winter season. Procurement costs in the individual ancillary services (active power loss and reactive energy) fell by CHF 7.4 million compared to the previous year. This is due to the lower procurement volume of active power losses.

As a result of these effects, procurement costs increased considerably year-on-year, rising from CHF 295.2 million to CHF 767.3 million.

### OPERATING EXPENSES

Operating expenses amounted to CHF 209.2 million, which represents no change compared to the previous year's period. Year-on-year increases in expenses for materials and third-party supplies (+ CHF 4.1 million) and other operating expenses (+ CHF 2.9 million) were offset by a decrease in personnel expenses (- CHF 7.0 million).

In the previous year, personnel expenses had contained a restructuring provision of CHF 7.5 million. After adjusting for this effect, personnel expenses rose slightly in the current financial year in response to an increase in staff numbers. The annual average number of full-time positions amounts to 448.3 (previous year: 441.9 FTE) to operate the core business and 33.8 (previous year: 33.1 FTE) to handle the orders in accordance with the Energy Act. In total in 2016, Swissgrid employed 482.1 full-time positions (previous year: 475.0 FTE) on an annual average.

Costs were driven up by maintenance costs, which are included in materials and third-party supplies and went up CHF 11.9 million in the reporting year. However, costs of materials and third-party supplies only rose moderately year-on-year thanks to lower expenses for grid asset management in the year under review and the recognition of a dismantling provision in the previous year.

The rise in other operating expenses was primarily caused by a year-on-year increase in rental and occupancy costs and in property taxes.

While amortisation of intangible assets remained unchanged year-on-year, depreciation of property, plant and equipment increased by CHF 13.1 million in the reporting period. This increase was driven by the completion of high-value projects, the transfer of grid assets at the start of the financial year and the fact that no congestion proceeds were used to finance grid investments in 2016 (previous year: CHF 31.0 million). Unlike the previous year, no impairment losses were recognised in the financial year under review (previous year: CHF 4.9 million).

### REVENUE AND VOLUME- AND TARIFF-RELATED TIMING DIFFERENCES

Net turnover increased a considerable 50% compared to the previous year, rising from CHF 837.7 million to CHF 1,250.8 million. Much of the increase in turnover came from CHF 433.8 million in income from auctioning bottleneck capacities at the national borders, which Swissgrid used to cover the chargeable costs of the transmission system in the reporting year, as set out in the ElCom ruling, and allocated to the grid utilisation segment. In addition, the repeated rise in income attributable to higher grid usage tariffs in 2016 increased net turnover in this segment even more.

In contrast, net turnover in the general ancillary services segment maintained its downward trajectory from the previous year and declined CHF 65.1 million as the lower general ancillary services tariff fell even further. Net turnover in the other two individual ancillary service segments saw only marginal changes compared to the previous year.

The net amounts of the volume- and tariff-related timing differences decreased by CHF 16.4 million in the reporting year (cumulative deficits less cumulative surpluses). A similar picture to net turnover is painted within the individual segments: in the grid utilisation segment, deficits increased another CHF 8.5 million compared to the previous year, while surpluses in the general ancillary services segment expanded CHF 22.9 million. Volume- and tariff-related timing differences in the individual ancillary service segments, by contrast, changed very little.

### EBIT, FINANCIAL INCOME AND NET INCOME

Swissgrid's EBIT is legally defined as the multiplication of the invested operating assets (IOA) by the capital cost rate (WACC) plus taxes.

The EBIT of 158.0 million was slightly higher (CHF 4.6 million) than the previous year's value of CHF 153.4 million. The rise is attributable to the year-on-year increase in invested operating assets.

The financial result and income tax expense for the reporting year went up only marginally compared to the previous year. As a result, net income amounted to CHF 91.9 million, or CHF 3.9 million more than in the previous year's period (CHF 88.0 million).

### BALANCE SHEET AND CASH FLOW STATEMENT

Total assets (excluding fiduciary positions) increased by CHF 543.6 million compared to the previous year to CHF 3.499 billion. This increase is largely due to the provision of cash and cash equivalents on 31 December 2016 in order to pay CHF 417.4 million in remuneration on 3 January 2017 as required by the ECom ruling issued on 20 October 2016.

As was the case the previous year, the absolute equity base was further strengthened by the net income as well as the takeover of additional parts of the transmission grid in return for consideration in the form of 30% of Swissgrid shares.

Adjusted for the balance sheet items held on a fiduciary basis and volume- and tariff-related timing differences, the equity ratio on 31 December 2016 amounts to 29.8% (32.3% on 31 December 2015). The equity ratio was negatively affected by the aforementioned increase in total assets. Adjusted for this effect, the equity ratio would have increased year-on-year as of 31 December 2016.

Cash flow from operating activities rose significantly from CHF 370.0 million to CHF 718.6 million due to the collection of CHF 433.8 million in congestion proceeds in the period under review. Large year-on-year increases in investments in property, plant and equipment caused cash flow from investing activities to swell by CHF 83.8 million. Cash flow from financing activities, by contrast, declined CHF 118.4 million relative to the previous year's level. In the previous year, this cash flow category had been affected by repayments of over CHF 300.0 million in financial liabilities.

## Risk Assessment

Risk management is an integral part of effective and prudent corporate management for Swissgrid. Swissgrid's risk management includes the entire organisation, is based on established standards (ISO 31000 and COSO ERM) and satisfies the internal requirements of corporate governance as well as the requirements under Swiss law.

### OBJECTIVES

The Risk Management unit assists management at all tiers in consciously dealing with risks, in expedient and transparent reporting, in managing and documenting an appropriate risk management system as well as in developing and maintaining a corporate culture that fosters the deliberate and forward-looking management of risks.

### ORGANISATION

The Board of Directors has defined the governance requirements for risk management and delegates its implementation to the CEO. The CEO has delegated this activity to the central risk management organisational unit, which reports directly to the CFO. It manages the risk management process and a virtual team of specialists in all business units.

### PROCESS

The comprehensive annual risk assessment is linked with the strategy process. The Risk Management unit has also introduced ongoing risk identification programs. The key risks are identified and assessed as part of a multi-stage, structured process that includes defining target/threshold values and strategies to handle risks. Risk monitoring, including the effectiveness and level of implementation of the measures taken, is performed as part of regular risk updates. The results of the risk assessment and the risk updates are reported to the Executive Board and the Board of Directors.

### RISK SITUATION

Swissgrid's risks have increased overall. Risk drivers can be found in the national as well as in the European political and regulatory environment, in the challenging economic conditions in the sector, and in European market structural developments. Significant progress has been made in mitigating risk in grid operations (e.g. assets, control systems, balance groups) and relating to legal proceedings. Examples of significant risks are:

### Strategic risks

- Isolation of the Swiss electricity system and insufficient assertion of interests: Swissgrid's role remains challenging at a national and international level. In Europe, the trend towards centralisation and restricted access to important committees are threatening our scope of action. Due to the lack of an electricity agreement between the EU and Switzerland, there is the potential risk that Switzerland's electricity system may become isolated. Unplanned load flows through Switzerland have increased since May 2015, resulting in a high, hard-to-manage load on the grid. The unplanned load flows are the result of the institution of flow-based market coupling in Europe, which does not consider the characteristics of the Swiss transmission grid and has thus adversely affected the security of supply in Switzerland. As Switzerland continues to lose influence in European bodies, it has become increasingly difficult to assert Swiss interests.
- Implementation of the "Strategic Grid 2025": "Strategic Grid 2025" cannot be completed on time due to lengthy procedures or objections by stakeholders. This poses a very real threat of restrictions on the transport of produced energy (e.g. from Valais) and on the import or transit of energy, which may lead to economic losses or a power shortage in the worst-case scenario. Speedier issuing of permits and procedural rulings may reduce this risk in the future.
- Loss of reputation: a loss of reputation can lead to restrictions in the capacity to act at a domestic and international level. The association of Swissgrid with negative topics and the company's greater visibility increase the likelihood of attacks on its reputation.
- Threat to financial stability: liquidity and financing problems due to negative procedural rulings, reduced internal financing capability (e.g. due to the reduction of the WACC from 2017), non-chargeable costs, etc., with a corresponding impact on indicators such as the equity ratio, interest cover ratio and rating.

### Operational risks

- Operating/infrastructure faults: infrastructure faults may be triggered by the failure of equipment such as transformers due to overloading, force majeure or accidents, etc. An operating or infrastructure fault may also be caused by a security incident. Attacks on physical or ICT infrastructure (e.g. cyber-attack) may lead to the failure of important systems and processes.
- Loss of control capability and grid manageability: speculation by market players, market player bankruptcies and insufficient control reserves could leave production and consumption dangerously imbalanced in Switzerland. Grid operation could be jeopardised by the failure of central grid management functions or by data falsification or unavailability. The confluence of several unfavourable factors (e.g. low water levels in rivers and reservoirs, additional loss of constant energy from nuclear power plants) could cause a power shortage that could result in blackouts or large-scale power failures.
- Inadequate competence portfolio: constant change in the sector means that new competencies will be necessary in order to meet future challenges in the short and medium term.

## Future Prospects

**Financial risks:** Swissgrid's business activities mean that it is exposed to various financial risks. These include liquidity, foreign currency, interest rate and counterparty risks:

- **Liquidity risk:** liquidity is ensured by the continuous planning and monitoring of the funding requirements, maintenance of minimum liquidity levels, and committed bank credit facilities.
- **Foreign currency risk:** foreign currency risk is primarily reduced by natural hedging (exposure netting). In addition, spot and forward exchange transactions are conducted based on a hedging strategy determined by the risk committee. This hedging strategy is reviewed regularly and updated as needed.
- **Interest rate risk:** the risk of interest rate changes is reduced by staggering the maturities and a balanced financing matrix. In addition, Swissgrid essentially targets long-term financing with fixed interest rates in line with its business model. Also, Swissgrid has introduced an asset and liability management-based income simulation system to manage interest income.
- **Counterparty risk:** financial transactions are concluded exclusively with counterparties with a defined minimum rating. Individual thresholds are also defined for each counterparty.

The risks mentioned are monitored periodically and are assessed by a separate risk committee at least quarterly. Additional measures are implemented where necessary. Swissgrid has established a monitoring process and taken important mitigation measures to address operating counterparty risks. Additional measures have been defined and are in the process of being implemented.

### STRATEGIC OUTLOOK

**Timely execution of planned grid projects:** To adapt the transmission system infrastructure to the changing energy industry environment, it will be necessary to execute the expansion projects defined in «Strategic Grid 2025» in a timely fashion. However, delays in permitting procedures are a major challenge that Swissgrid will have to overcome together with policymakers and government officials. The new «Electricity Grid Strategy» bill defines ways to optimise and accelerate the procedures, including rapid dossier processing and more broadly coordinated communications. In addition to infrastructure upgrades, Swissgrid will also develop more grid- and market-based solutions in order to optimise grid capacity utilisation.

**Long-term maintenance of the security of supply:** Additional steps must be taken to ensure a secure grid operation and the continued maintenance of the security of supply. Swissgrid is rolling out a new grid control system that will increase automation and accelerate processes. By the end of 2017, Swissgrid will be able to switch most of the substations centrally and thereby replace the old system. Swissgrid is also working to make the power market more efficient and secure. For example, it will institute market development measures such as real time-based balance energy pricing. Tight integration with European grids is absolutely essential for maintaining a high security of supply in Switzerland. That is why Swissgrid promotes Switzerland's interests in Europe by participating in various bodies and through shareholdings.

**Improved safety, security and efficiency:** Swissgrid works to continuously improve safety and security across its entire organisation. Its efforts extend to personal protection, equipment safety, plant security and information security. Swissgrid intends to establish a comprehensive safety and security strategy and organisation in order to detect risks as early as possible and take suitable precautions. At the same time, Swissgrid is continuing its efforts to work more efficiently and effectively in order to further reduce operating costs.

**Research and development:** Swissgrid actively engages in research and development in order to continue performing its duties safely and cost-effectively in the future. Its project portfolio is aligned with its strategic goals and consists of internal activities and projects being conducted in cooperation with universities and other Swiss partners.

## FINANCIAL OUTLOOK

**Grid investments:** Investment volumes are expected to remain high, ranging from CHF 150 million to 250 million a year, due to the need to achieve a sustainable energy future and carry out the measures defined in the «Strategic Grid 2025» report. The budget has been assigned a lower likelihood of realisation due to persistent restrictions, particularly those regarding permits for power line construction and modification. As such, Swissgrid currently expects to invest approx. CHF 150 million a year in the grid over the medium term.

**Operating costs:** In terms of operating costs, the focus is on the multi-year programme to increase efficiency and reduce costs, whose scheduled implementation was determined by the Board of Directors in March 2015. The ambitious target level is expected to be attained by 2020. The results achieved to date are positive and reaffirm the cost target. In 2017, Swissgrid will build on the results and experience achieved thus far, and will continue to implement the defined measures.

**EBIT and net income:** Based on the regulatory business model, EBIT is directly dependent on the IOA as well as the WACC. The reduction of the WACC from 4.70% to 3.83% ruled by the Federal Department of Environment, Transport, Energy and Communication (UVEK) for the year 2017 will have a negative impact on EBIT and net income. In accordance with the dividend policy approved by the Board of Directors, the income generated will be retained on a pro rata basis depending on the equity ratio. This enables a further increase in the equity ratio to ensure Swissgrid's long-term financial stability.

**Grid acquisitions:** The next transfer of individual grid assets will take place at the start of 2018. These are transmission system assets that could not be transferred earlier. The first valuation adjustment of these acquired grid systems will take place in autumn 2018, similar to previous grid acquisitions. However, any effects on Swissgrid's balance sheet (increase in non-current assets, equity and borrowed capital) are expected to be marginal.

The ElCom ruling issued on 20 October 2016 definitively established the method for determining the assessed value of the transmission system. The first payment based on this method was made on 3 January 2017. The final remuneration owed under this method cannot be determined until all valuation proceedings related to valuation adjustment 2 have been finally adjudicated. The financial consequences are difficult to estimate at this time. However, the outcome of the proceedings has no direct impact on Swissgrid's income.

# Financial statements Swiss GAAP FER





## Income statement

In millions of CHF	Notes	2016	2015
Net turnover	4, 5	1,250.8	837.7
Other operating income	4, 6	18.2	17.4
Change in volume- and tariff-related timing differences	4, 15	- 16.4	- 87.4
Capitalised self-constructed assets		13.6	14.3
<b>Total operating income</b>		<b>1,266.2</b>	<b>782.0</b>
Procurement costs	4, 5	767.3	295.2
<b>Gross profit</b>		<b>498.9</b>	<b>486.8</b>
Cost of materials and third-party supplies	7	97.9	93.8
Personnel expenses	8	86.6	93.6
Other operating expenses	9	24.7	21.8
<b>Earnings before interest, income taxes, depreciation and amortisation</b>		<b>289.7</b>	<b>277.6</b>
Depreciation on property, plant and equipment	13	113.6	100.5
Amortisation on intangible assets	13	18.1	18.8
Impairment losses	13	-	4.9
<b>Earnings before interest and income taxes (EBIT)</b>	<b>4</b>	<b>158.0</b>	<b>153.4</b>
Financial income	10	0.7	0.2
Financial expenses	11	44.6	44.0
<b>Earnings before income taxes</b>		<b>114.1</b>	<b>109.6</b>
Income taxes	12	22.2	21.6
<b>Net income</b>		<b>91.9</b>	<b>88.0</b>

### EARNINGS PER SHARE

CHF	2016	2015
Net income	91,913,462	87,965,212
Weighted average number of shares outstanding	316,724,580	312,393,906
<b>Non-diluted earnings per share</b>	<b>0.29</b>	<b>0.28</b>
Dilution from the conversion of the convertible loans	- 0.08	- 0.08
<b>Diluted earnings per share</b>	<b>0.21</b>	<b>0.20</b>

The dilution arises from the potential conversion of the convertible loans to equity. Assuming that conversion had taken place on 1 January of the reporting year, the interest expense would have been reduced by CHF 32.5 million (previous year: CHF 27.9 million). Given that taxes are chargeable in Swissgrid's regulated business model, the conversion would have increased

net income by CHF 32.5 million (previous year: CHF 27.9 million). At the same time, the average number of shares outstanding would have increased by 281 624 053 units (previous year: 267 329 092 units). This leads to a potential dilution of CHF -0.08 per share (previous year: CHF -0.08 per share).

## Balance sheet - assets

In millions of CHF	Notes	31.12.2016	31.12.2015
Property, plant and equipment	13	2,196.3	2,072.2
Intangible assets	13	169.2	167.0
Financial assets	14	10.3	10.0
Long-term deficits arising from volume- and tariff-related timing differences	15	331.1	272.7
<b>Non-current assets</b>		<b>2,706.9</b>	<b>2,521.9</b>
Assets held on fiduciary basis	16	34.4	346.0
Short-term deficits arising from volume- and tariff-related timing differences	15	139.0	190.6
Inventory		2.1	2.9
Trade accounts receivable	17	173.5	158.6
Other receivables	18	5.7	3.4
Prepaid expenses and accrued income	19	43.5	50.0
Cash and cash equivalents	20	428.2	27.9
<b>Current assets</b>		<b>826.4</b>	<b>779.4</b>
<b>Assets</b>		<b>3,533.3</b>	<b>3,301.3</b>

## Balance sheet - equity and liabilities

In millions of CHF	Notes	31.12.2016	31.12.2015
Share capital		317.9	313.4
Capital reserves		404.0	395.0
Retained earnings		303.7	233.3
<b>Total equity</b>		<b>1,025.6</b>	<b>941.7</b>
Non-current financial liabilities	21	1,712.1	1,696.2
Non-current provisions	22	45.6	48.5
Non-current surpluses arising from volume-and tariff-related timing differences	15	57.7	18.5
<b>Non-current liabilities</b>		<b>1,815.4</b>	<b>1,763.2</b>
Liabilities held on fiduciary basis	16	34.4	346.0
Current financial liabilities	21	-	25.0
Trade accounts payable	23	495.9	73.1
Other liabilities	24	12.3	15.1
Accrued expenses and deferred income	25	141.3	112.0
Current provisions	22	3.4	4.2
Current surpluses arising from volume-and tariff-related timing differences	15	5.0	21.0
<b>Current liabilities</b>		<b>692.3</b>	<b>596.4</b>
<b>Total liabilities</b>		<b>2,507.7</b>	<b>2,359.6</b>
<b>Equity and liabilities</b>		<b>3,533.3</b>	<b>3,301.3</b>

## Cash flow statement

In millions of CHF, excluding balance sheet items held on fiduciary basis	Notes	2016	2015
Net income		91.9	88.0
Financial expenses	11	44.6	44.0
Financial income	10	- 0.7	- 0.2
Current income taxes	12	23.3	22.2
Depreciation and amortisation	13	131.7	119.2
Impairment losses	13	-	4.9
Gains/Losses on disposal of non-current assets		- 0.2	0.1
Change in employer contribution reserves	14	- 0.2	- 0.2
Change in provisions	22	- 3.7	8.4
Change in inventory		0.8	0.4
Change in trade accounts receivable		- 14.9	5.3
Change in other receivables		- 2.3	-
Change in prepaid expenses and accrued income		6.5	4.4
Change in volume- and tariff-related timing differences	4, 15	16.4	87.4
Change in trade accounts payable		422.8	- 14.8
Change in other current liabilities		- 2.8	8.0
Change in accrued expenses and deferred income		32.2	13.2
Income taxes paid		- 26.8	- 20.3
<b>Cash flow from operating activities</b>		<b>718.6</b>	<b>370.0</b>
Gross investments in property, plant and equipment		- 183.0	- 115.8
Congestion proceeds received for grid investments		-	31.0
<b>Net investments in property, plant and equipment</b>	<b>13</b>	<b>- 183.0</b>	<b>- 84.8</b>
Divestment in property, plant and equipment		0.2	-
Gross investments in intangible assets		- 29.7	- 39.3
Congestion proceeds received for grid investments		-	0.8
<b>Net investments in intangible assets</b>	<b>13</b>	<b>- 29.7</b>	<b>- 38.5</b>
Investments in financial assets		- 0.1	- 5.2
Divestment in financial investments		-	0.2
Dividends received		0.5	-
<b>Cash flow from investing activities</b>		<b>- 212.1</b>	<b>- 128.3</b>
Change in current financial liabilities		- 40.8	- 319.6
Issuing of long-term bonds	21	-	150.0
Interest paid		- 43.9	- 41.9
Dividends paid		- 21.5	- 13.0
Equity transaction cost		-	- 0.1
<b>Cash flow from financing activities</b>		<b>- 106.2</b>	<b>- 224.6</b>
<b>Change in cash and cash equivalents</b>		<b>400.3</b>	<b>17.1</b>
<b>Composition</b>			
Cash and cash equivalents at beginning of period		27.9	10.8
Cash and cash equivalents at end of period		428.2	27.9
<b>Change in cash and cash equivalents</b>		<b>400.3</b>	<b>17.1</b>

### NON-CASH INVESTING AND FINANCING ACTIVITIES

The purchase consideration of CHF 45.3 million for the transfer of additional parts of the transmission system was settled 30% in Swissgrid shares and 70% in loans (cf. Note 13).

## Statement of changes in equity

In millions of CHF	Share capital	Capital reserves	Retained earnings	Total equity
Balance at 31.12.2014	276.4	329.6	158.3	764.3
Allocation	-	-	-	-
Dividends paid	-	-	- 13.0	- 13.0
Capital increases (minus transaction costs)	37.0	65.4	-	102.4
Net income 2015	-	-	88.0	88.0
Balance at 31.12.2015	313.4	395.0	233.3	941.7
Allocation	-	-	-	-
Dividends paid	-	-	- 21.5	- 21.5
Capital increases (minus transaction costs)	4.5	9.0	-	13.5
Net income 2016	-	-	91.9	91.9
<b>Balance at 31.12.2016</b>	<b>317.9</b>	<b>404.0</b>	<b>303.7</b>	<b>1,025.6</b>

The share capital consists of 317 917 131 (previous year: 313 398 719) fully paid-up registered shares with a par value of CHF 1 per share.

As of 31 December 2016, Swissgrid has conditional share capital of a maximum of CHF 128 409 932, divided into 128 409 932 registered shares with a par value of CHF 1 per share (previous year: CHF 128 660 249, divided into 128 660 249 registered shares with a par value of CHF 1).

#### Capital increase based on contributions in kind

The share capital increased by CHF 2.93 million to enable the takeover of additional parts of the transmission system as of 4 January 2016. The issue price amounted to CHF 8.10 million.

#### Capital increase from conditional capital

The change to the Articles of Association to create conditional share capital of CHF 130 million was registered in the commercial register as of 4 January 2016. The conditional capital was created to exercise conversion rights to be assigned to creditors of convertible loans. A conditional share capital increase with a par value of CHF 1.59 million took place between 2 November 2016 and 9 November 2016 (so-called valuation adjustment 1). The issue price amounted to CHF 5.48 million.

The amount of the capital increase corresponds to the value after recognising the equity transaction costs (CHF 0.02 million) as a reduction in the capital reserves.

# Notes

## 1. ACCOUNTING PRINCIPLES

### GENERAL INFORMATION

The 2016 financial statements of Swissgrid Ltd (hereinafter: Swissgrid) have been prepared in accordance with Swiss GAAP FER. The financial statements provide a true and fair view of the company's assets, financial position and results of operations.

The accounting principles remained unchanged from those applied in the prior year.

### CONVERSION OF FOREIGN CURRENCY POSITIONS

The accounting records are maintained in local currency (Swiss francs, CHF). All monetary assets and liabilities recognised in foreign currencies are converted at the exchange rate as of the balance sheet date. Transactions in foreign currencies are converted at the exchange rate on the day the transaction took place. Foreign exchange gains and losses resulting from transactions in foreign currencies are recognised in the income statement 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. The cash flow from operating activities is calculated using the indirect method.

### REVENUE RECOGNITION

Revenue is recognised in the income statement upon performance of Swissgrid's obligations. For activities regulated under the Federal Electricity Supply Act (StromVG), the measurement of performance is based mainly on energy data directly metered on the transmission system or reported from downstream grid levels.

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 ACCORDING TO STROMVG

**Volume- and tariff-related timing differences (surpluses and deficits):** according to Art. 14 StromVG, grid utilisation costs must be allocated to users on a user-pays basis. The tariffs for a financial year are determined based on planned costs. Due to price and volume deviations, actual expenses and income vary from the tariff calculation on both the revenue and procurement side. This results in surpluses or deficits, i.e. the tariff revenues from a financial year are higher or lower than the actual expenses 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. The expected reduction of the volume- and tariff-related timing differences within 12

months after the balance sheet date are recognised as short-term surpluses or deficits arising from volume- and tariff-related timing differences in the balance sheet.

**EBIT regulated under StromVG:** Earnings before interest and 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 plus taxes. Accordingly, operating assets consist of net current assets determined on a monthly basis and non-current assets as of the end of the financial year. The weighted average cost of capital rate (WACC) is based on the current international practice of the WACC capital cost concept with reference to the Capital Asset Pricing Model (CAPM). Besides considering the findings of financial market theory, the regulatory framework conditions in Switzerland and the current situation in the money and capital market are also taken into account. In 2016, the applied WACC based on this calculation is unchanged from the previous year at 4.70%.

The chargeability of Swissgrid's operating and capital costs for tariff-setting purposes is subject to approval by ElCom, which takes place ex post. In case of an ex post cost adjustment, an appeal can be lodged with the Federal Administrative Court. A cost adjustment impacting Swissgrid's operating result is applied whenever no appeal is lodged, or whenever an appeal's prospects for success are judged to be less than 50% on the basis of a reappraisal, or whenever a legally binding ruling is issued.

### PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is recognised at acquisition or production cost, less accumulated depreciation and amortisation and any impairment losses. Significant spare parts, which are likely to be used for a longer period and whose use only takes place in connection with a non-current asset item, are recognised in non-current assets and depreciated over the remaining useful life of the relevant system.

Depreciation is calculated using the straight-line method on the basis of the estimated useful technical and economic lives of the assets. The useful life is determined as follows:

- Lines: 15 to 60 years
- Substations: 10 to 35 years
- Buildings and expansions: 5 to 50 years
- Other property, plant and equipment: 3 to 8 years
- Construction in progress and properties: only applicable in the case of impairment

### INTANGIBLE ASSETS

Intangible assets are recognised at acquisition or production cost less accumulated amortisation and any impairment losses. Amortisation is calculated using the straight-line method on the basis of the estimated useful technical and economic lives of the assets.

The useful life is determined as follows:

- Rights of use and easements: contract term
- Software and technical regulations: 3 to 5 years
- Intangible assets under development: only applicable in the case of impairment

### IMPAIRMENT LOSSES

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, are classified as non-current assets. As of each balance sheet date, a review is performed to determine whether any assets under construction or intangible assets under development have to be impaired. These are recognised as impairment losses in the year of identification. Ordinary depreciation or amortisation of these assets begins once they are completed or ready for operation.

### FINANCIAL ASSETS

Financial assets are measured at acquisition costs less any adjustments for impairment, if required. These include investments that are controlled by Swissgrid, but which do not have a significant impact on the financial statements, as well as investments with a capital share of less than 20%. Employer contribution reserves without conditional renounced use are also recognised in financial assets.

### INVENTORY

Inventory includes waste material for maintaining the grid systems. Inventory is measured at the lower of acquisition cost or market price.

### ACCOUNTS RECEIVABLE

Accounts receivable are reported at their nominal value less any impairments 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 values.

### BONDS

Bonds issued on the capital market are recognised at their nominal value. Deviations from the nominal value in the case of below- or above-par issues are recognised as accruals and are reversed on a straight-line basis over the term of the bond.

### LIABILITIES

Liabilities are recognised at their nominal value.

### PROVISIONS

Provisions are 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 a utilisable inflow of funds is probable and capable of being estimated. 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 pension fund as of 1 January of the year in which they turn 18. They are insured for disability and death. From 1 January of the year in which they turn 25, employees are also covered by retirement insurance.

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 benefits arising from freely available employer contribution reserves are recognised as an asset.

An economic obligation (e.g. 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 for the period, the difference between the annually calculated economic benefit from pension fund surpluses and obligations, as well as the change in the employer contribution reserves are recognised in the income statement as personnel expenses.

### TRANSACTIONS WITH RELATED PARTIES

Related parties are organisations and persons that are able to exercise significant influence, either directly or indirectly, on Swissgrid's financial or operational 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, or which are controlled by a related shareholder, are also considered to be related parties, as are members of the Board of Directors and the Executive Board. 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

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

### INCOME TAXES

Current income taxes are calculated based on the taxable results on an accruals basis.

The annual accrual of deferred taxes is based on a balance sheet perspective (balance sheet method) and considers all future income tax effects (comprehensive method).

## 2. ESTIMATION UNCERTAINTY

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. 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 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 "Activities according to StromVG" in Note 1, as well as the comments in the following section.

## 3. LEGAL PROCEEDINGS

Rulings/proceedings by ElCom	Date	31.12.2016*	31.12.2015*
1 Proceedings concerning 2011 volume- and tariff-related timing differences	5.2.2013	a	a
2 Proceedings concerning 2012 volume- and tariff-related timing differences	18.6.2013	a	a
3 Proceedings concerning 2013 volume- and tariff-related timing differences	-	a	a
4 Proceedings concerning 2014 volume- and tariff-related timing differences	-	a	a
5 Proceedings concerning 2015 volume- and tariff-related timing differences	-	a	a
6 Proceedings concerning 2016 volume- and tariff-related timing differences	-	a	-

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

a = Opening of proceedings adjourned or not yet taken place

b = Opening of proceedings by ElCom

c = Examination report submitted and right of fair hearing exercised

d = Notification of the decision by ElCom

e = Appeal to the Federal Administrative Court

f = Judgement pronounced by the Federal Administrative Court

g = Appeal to the Federal Court

h = Legally binding judgement pronounced



The list includes proceedings whose outcome may result in a reduction in Swissgrid's chargeable costs. The financial impact of third-party proceedings in which Swissgrid is involved are included in Swissgrid's financial statements if the Swiss GAAP FER criteria for recognition have been met. However, they have no direct impact on Swissgrid's results as they are included in the volume- and tariff-related timing differences.

#### NOTES ON THE PROCEEDINGS

**Point 1:** On 5 February 2013, ECom launched proceedings to examine the 2011 volume- and tariff-related timing differences. The proceedings were suspended until the legally binding conclusion of the 2009 to 2012 tariff proceedings. Should it ultimately be ruled that the costs included in the volume- and tariff-related timing differences are to be reduced, Swissgrid would be compelled to initiate legal proceedings.

The 2011 operating and capital costs are CHF 7.2 million higher than the comparable 2010 cost basis approved by ECom.

**Point 2:** On 18 June 2013, ECom initiated proceedings relating to 2012 volume- and tariff-related timing differences and subsequently suspended these proceedings until the legally binding conclusion of the 2009 to 2012 tariff proceedings as well as the proceedings relating to the 2011 volume- and tariff-related timing differences. Should it ultimately be ruled that the costs included in the volume- and tariff-related timing differences are to be reduced, Swissgrid would once again be compelled to initiate legal proceedings. The 2012 operating and capital costs are CHF 11.4 million higher than the comparable 2010 cost basis approved by ECom.

**Points 3, 4, 5 and 6:** If ECom rules that the costs included in the volume- and tariff-related timing differences be reduced for the not-yet initiated proceedings on the 2013 to 2016 volume- and tariff-related timing differences, Swissgrid would also be compelled to initiate legal proceedings.

The operating and capital costs for 2013 are CHF 23.7 million higher than the comparable 2010 cost basis approved by ECom, while the operating and capital costs are CHF 48.7 million higher for 2014, CHF 30.3 million higher for 2015 and CHF 30.2 million higher for 2016.

Moreover, in its ruling in 2013, regarding the obligation to bear the costs for the ITC shortfalls, ECom decided that no ITC shortfalls could be charged to the LTC holders. As a result, Swissgrid reversed all revenues with LTC holders and adjusted the outstanding receivables in 2013. Swissgrid included the reversals and value adjustments totalling CHF 42.7 million in the 2013 volume- and tariff-related timing differences, although ECom did not address the issue of the chargeability of the tariffs in the ruling mentioned above. Swissgrid would be compelled to initiate legal proceedings if the tariffs were ruled to be non-chargeable.

**Summary of proceedings - points 1 to 6:** From Swissgrid's perspective, the cumulative risk for non-chargeable costs as of 31 December 2016 is CHF 194.2 million (CHF 7.2 million for 2011, CHF 11.4 million for 2012, CHF 66.4 million for 2013, CHF 48.7 million for 2014, CHF 30.3 million for 2015 and CHF 30.2 million for 2016). In the previous year, the cumulative risk as at 31 December 2015 amounted to CHF 164.0 million.

Swissgrid's Board of Directors and Executive Board believe that all costs for the years 2011 to 2016 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 chargeable and consequently recognised them in full in the volume- and tariff-related timing differences.

A legally binding court ruling in the court of final appeal on the aforementioned proceedings is not likely to be made before 2019. If, contrary to Swissgrid's assessment, the costs claimed are ruled to be non-chargeable, this would be reflected no earlier than in the 2019 financial statements. Even if the maximum risk of CHF 194.2 million materialises, Swissgrid's equity situation is not jeopardised due to the capital increase in connection with the grid acquisitions in 2013, 2014, 2015 and 2016 as well as the net incomes achieved since then.

## 4. SEGMENT REPORTING

For segment reporting, the costs of capitalised self-constructed assets are deducted from operating expenses and are therefore not included in total operating income.

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

### SEGMENT REPORT 2016

In millions of CHF	Total	Grid utilisation	General ancillary services/ balance energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Eliminations	Total activities according to StromVG	Further activities
Net turnover	1,250.8	910.5	255.5	45.1	46.0	- 6.3	1,250.8	-
Other operating income	18.2	1.2	-	-	-	-	1.2	17.0
Volume- and tariff-related timing differences	- 16.4	8.5	- 22.9	- 0.3	- 1.7	-	- 16.4	-
Total operating income	1,252.6	920.2	232.6	44.8	44.3	- 6.3	1,235.6	17.0
Procurement costs	- 767.3	- 484.7	- 207.3	- 42.5	- 39.1	6.3	- 767.3	-
Gross profit	485.3	435.5	25.3	2.3	5.2	-	468.3	17.0
Operating expenses	- 195.6	- 157.1	- 19.6	- 2.1	- 2.2	-	- 181.0	- 14.6
Depreciation/amortisation and impairment losses	- 131.7	- 126.2	- 3.1	- 0.3	- 0.3	-	- 129.9	- 1.8
<b>Earnings before interest and income tax (EBIT)</b>	<b>158.0</b>	<b>152.2</b>	<b>2.6</b>	<b>- 0.1</b>	<b>2.7</b>	<b>-</b>	<b>157.4</b>	<b>0.6</b>

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

### CHANGE IN VOLUME- AND TARIFF-RELATED TIMING DIFFERENCES PER SEGMENT

In millions of CHF	Total	Grid utilisation	General ancillary services/ balance energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Eliminations	Total activities according to StromVG	Further activities
Net turnover	1,250.8	910.5	255.5	45.1	46.0	- 6.3	1,250.8	-
Other operating income	18.2	1.2	-	-	-	-	1.2	17.0
Procurement costs	- 767.3	- 484.7	- 207.3	- 42.5	- 39.1	6.3	- 767.3	-
Operating expenses	- 195.6	- 157.1	- 19.6	- 2.1	- 2.2	-	- 181.0	- 14.6
Depreciation/amortisation and impairment losses	- 131.7	- 126.2	- 3.1	- 0.3	- 0.3	-	- 129.9	- 1.8
Return on operating assets (EBIT)	- 158.0	- 152.2	- 2.6	0.1	- 2.7	-	- 157.4	- 0.6
<b>Volume- and tariff-related timing differences</b>	<b>16.4</b>	<b>- 8.5</b>	<b>22.9</b>	<b>0.3</b>	<b>1.7</b>	<b>-</b>	<b>16.4</b>	<b>-</b>

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

## SEGMENT REPORT 2015

In millions of CHF	Total	Grid utilisation	General ancillary services/ balance energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Eliminations	Total activities according to StromVG	Further activities
Net turnover	837.7	430.2	320.6	49.3	42.2	- 4.6	837.7	-
Other operating income	17.4	-	-	-	-	-	-	17.4
Volume- and tariff-related timing differences	- 87.4	35.8	- 126.5	2.1	1.2	-	- 87.4	-
Total operating income	767.7	466.0	194.1	51.4	43.4	- 4.6	750.3	17.4
Procurement costs	- 295.2	- 48.3	- 162.5	- 50.3	- 38.7	4.6	- 295.2	-
Gross profit	472.5	417.7	31.6	1.1	4.7	-	455.1	17.4
Operating expenses	- 194.9	- 154.6	- 21.6	- 2.1	- 1.6	-	- 179.9	- 15.0
Depreciation/amortisation and impairment losses	- 124.2	- 118.8	- 3.0	- 0.3	- 0.2	-	- 122.3	- 1.9
<b>Earnings before interest and income tax (EBIT)</b>	<b>153.4</b>	<b>144.3</b>	<b>7.0</b>	<b>- 1.3</b>	<b>2.9</b>	<b>-</b>	<b>152.9</b>	<b>0.5</b>

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

## CHANGE IN VOLUME- AND TARIFF-RELATED TIMING DIFFERENCES PER SEGMENT

In millions of CHF	Total	Grid utilisation	General ancillary services/ balance energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Eliminations	Total activities according to StromVG	Further activities
Net turnover	837.7	430.2	320.6	49.3	42.2	- 4.6	837.7	-
Other operating income	17.4	-	-	-	-	-	-	17.4
Procurement costs	- 295.2	- 48.3	- 162.5	- 50.3	- 38.7	4.6	- 295.2	-
Operating expenses	- 194.9	- 154.6	- 21.6	- 2.1	- 1.6	-	- 179.9	- 15.0
Depreciation/amortisation and impairment losses	- 124.2	- 118.8	- 3.0	- 0.3	- 0.2	-	- 122.3	- 1.9
Return on operating assets (EBIT)	- 153.4	- 144.3	- 7.0	1.3	- 2.9	-	- 152.9	- 0.5
<b>Volume- and tariff-related timing differences</b>	<b>87.4</b>	<b>- 35.8</b>	<b>126.5</b>	<b>- 2.1</b>	<b>- 1.2</b>	<b>-</b>	<b>87.4</b>	<b>-</b>

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

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Earnings before interest and tax (EBIT) per segment within the StromVG-regulated activities correspond to the capital costs on the invested operating assets plus taxes (cf. Note 1). The individual expense and income positions assigned to the four segments within the StromVG-regulated activities are listed in Note 5.

**Grid utilisation:** The grid utilisation segment is predominantly financed by various charges for use of the grid. This segment also includes a part of the compensation for international transit flows (ITC); the other part flows to the active power losses segment.

Net turnover in this segment has more than doubled year-on-year. This marked increase is largely due to income from auctioning bottleneck capacities at the national borders, which Swissgrid used to cover the chargeable costs of the transmission system as permitted by the ElCom ruling. In addition, the repeated rise in income attributable to higher grid usage tariffs in 2016 increased net turnover even more.

Procurement costs in the financial year were primarily affected by the 20 October 2016 ruling issued by ElCom on the method for establishing the assessed value of the transmission system:

The ruling was issued in connection with the transfer of the transmission system and all its associated equipment from its previous owners to Swissgrid. In its 20 September 2012 ruling, ElCom had decreed that the remuneration had to be equal to the regulatory value. This ruling was contested by several former transmission system owners. On 11 November 2013, the Swiss Federal Administrative Court ruled that the owners had a constitutional right to full compensation in accordance with the principles of expropriation law. It remanded the matter to ElCom to determine the applicable valuation method.

Next, the former transmission system owners developed a contractually defined method for establishing the assessed value. ElCom then implemented the Swiss Federal Administrative Court's decision by issuing a new ruling on this method. The ruling has not been appealed.

The remuneration owed under the ruling increased the procurement costs in this segment by CHF 417.4 million. The first payment was made on 3 January 2017.

The final remuneration owed under this valuation method will be determined in the course of valuation adjustment 2, which is still ongoing (cf. Note 27).

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Procurement costs also include the 2016 portion of the additional remuneration paid to former transmission system owners for operating and capital costs.

This segment's total costs are slightly higher than its net turnover for the financial year, which explains the CHF 8.5 million increase in deficits.

**General ancillary services/balance energy:** The largest expense item for this segment is the control power provision, i.e. the reservation of power plant capacity in the interests of balancing energy consumption and energy injection. Provision costs rose nearly CHF 50 million year-on-year due to the strained energy and grid situation in the 2015/2016 winter season and are thus responsible for the higher procurement costs.

The expenses relating to general ancillary services (AS) are primarily covered by tariff revenues. As in the previous year, the drop in net turnover was largely due to the lower general AS tariff.

Despite the decline in net turnover and increase in procurement costs, income exceeded expenses, resulting in an increase of CHF 22.9 million in the surplus in the reporting year.

**Active power losses (individual ancillary services):** This segment reports expenses and income for active power losses in the transmission grid. In addition to tariff revenues, part of the income from ITC flows into this segment. The procurement of energy to compensate active power losses takes place on the spot market and via tenders.

In the financial year, surpluses rose slightly to CHF 0.3 million as procurement costs fell faster than net turnover.

**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.

The net proceeds generated in this segment in 2016 exceeded the costs slightly, which remained essentially unchanged from the previous year. As a result, the deficits declined CHF 1.7 million in the financial year.

## 5. NET TURNOVER AND PROCUREMENT COSTS ACCORDING TO THE ELECTRICITY SUPPLY ACT (STROMVVG)

In millions of CHF	Segment	2016	2015
Tariff income for grid utilisation	A	470.5	415.7
Net income from ITC	A/C	9.3	20.0
Income from auctions for the reduction of chargeable grid costs	A	433.8	–
Tariff income for general ancillary services (AS) and income from unintentional deviation	B/D	260.3	307.9
Income from AS energy and from balance group/balance energy	B	37.4	50.9
Tariff income for active power losses	C	42.0	43.8
Tariff income for reactive energy	D	3.8	4.0
Eliminations		– 6.3	– 4.6
<b>Net turnover</b>		<b>1,250.8</b>	<b>837.7</b>
Operating expenses for transmission system	A	440.0	8.7
Capital expenses for transmission system	A	44.7	39.6
Expenses for AS control power provision and unintentional deviation	B	171.8	123.7
Expenses for automatic start-up/island operation capability	B	1.1	1.1
Expenses for grid enhancement	B	14.2	17.2
Expenses for AS energy and for balance groups/balance energy	B	20.2	20.5
Expenses for compensation of active power loss	C	42.5	50.3
Expenses for reactive energy/voltage maintenance	D	39.1	38.7
Eliminations		– 6.3	– 4.6
<b>Procurement costs</b>		<b>767.3</b>	<b>295.2</b>

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)

Segment reporting is provided in Note 4.

Income from ITC consists of the following:

- Compensation for grid utilisation (A) CHF 6.2 million (previous year: CHF 14.5 million)
- Compensation for active power losses (C) CHF 3.1 million (previous year: CHF 5.5 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 4.9 million (previous year: CHF 5.0 million) are deducted from the gross income of CHF 11.1 million (previous year: CHF 19.5 million).

The tariff income for general AS and income from unintentional exchange is split as follows:

- General AS (B): CHF 218.1 million (previous year: CHF 269.7 million)
- Reactive energy (D): CHF 42.2 million (previous year: CHF 38.2 million)

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

## 6. OTHER OPERATING INCOME

In millions of CHF	2016	2015
Handling the orders in accordance with the Energy Act	5.4	5.0
Auction clearing	7.7	9.1
Issuance of guarantees of origin for renewable energies	3.9	3.3
Other	1.2	-
	<b>18.2</b>	<b>17.4</b>

The handling of the orders in accordance with the Energy Act includes compensation for expenditures in connection with CRF (cost-covering remuneration for feed-in to the electricity grid), ACF (additional cost financing) and OR (one-off remuneration).

## 7. COST OF MATERIALS AND THIRD-PARTY SUPPLIES

In millions of CHF	2016	2015
Grid maintenance	25.9	14.0
Grid system control	10.7	12.2
Other services in the grid area	17.0	16.7
Expenses for projects, advisory and material	34.7	35.4
Dismantling of grid elements	-	6.1
Hardware/software maintenance	9.6	9.4
	<b>97.9</b>	<b>93.8</b>

The expense for grid maintenance increased significantly during the reporting period due to a year-on-year increase in maintenance costs.

Other services in the grid area particularly include easement management services performed by third parties and the operating expense for mixed-use systems.

## 8. PERSONNEL EXPENSES

In millions of CHF	2016	2015
Salaries, bonuses, allowances	70.4	68.9
Employee insurance	12.2	12.2
Other personnel expenses	4.0	5.0
Provision for restructuring	-	7.5
	<b>86.6</b>	<b>93.6</b>
<b>Headcount at 31.12.</b>		
<b>Permanent employment:</b>		
Number of employees		
for core business (StromVG)	450	444
for the handling of the orders in accordance with the Energy Act (EnG)	34	29
	484	473
expressed as full-time equivalents:		
for core business (StromVG)	432.0	416.3
for the handling of the orders in accordance with the Energy Act (EnG)	31.6	26.3
	463.6	442.6
<b>Fixed-term employment:</b>		
Number of employees		
for core business (StromVG)	23	20
for the handling of the orders in accordance with the Energy Act (EnG)	4	9
	27	29
expressed as full-time equivalents:		
for core business (StromVG)	20.8	21.0
for the handling of the orders in accordance with the Energy Act (EnG)	4.0	7.6
	24.8	28.6

Other personnel expenses include, in particular, allowances for external catering for employees, for training and further education, recruitment as well as lump-sum expenses.

## EXECUTIVE BOARD REMUNERATION

In millions of CHF	2016	2015
Fixed remuneration (incl. lump-sum expenses)	1.40	2.04
Variable remuneration	0.66	0.64
Non-cash benefits <sup>1</sup>	0.02	0.02
Pension benefits <sup>2</sup>	0.34	0.50
<b>Total remuneration to the Executive Board</b>	<b>2.42</b>	<b>3.20</b>
<b>Of which to the highest earning member of the Executive Board</b>		
Fixed remuneration (incl. lump-sum expenses)	0.38	0.90
Variable remuneration	0.16	0.14
Pension benefits <sup>2</sup>	0.09	0.22
<b>Total remuneration to the highest earning member of the Executive Board</b>	<b>0.63</b>	<b>1.26</b>

<sup>1</sup> Non-cash benefits include the private use of business vehicles.

<sup>2</sup> Pension benefits include employer contributions to social security schemes and the employee pension plan.

The previous CEO of Swissgrid left the company in September 2015. In accordance with the contractual provisions, salary payments, including social benefits, continued to be paid until 30 September 2016. The respective amounts were already included in their entirety in the previous year values (accrual principle).

Further information on the members of the Executive Board can be found in the Corporate Governance Report.

## 9. OTHER OPERATING EXPENSES

In millions of CHF	2016	2015
Rental and occupancy costs	7.2	5.9
Ground rents	1.5	1.0
Rental costs for communication equipment/telecommunication expense	3.9	4.1
Board of Directors fees and expenses, incl. social costs	0.8	0.8
Actual expenses for travel and subsistence for employees and third parties	1.9	2.2
Fees, dues and licences	5.0	2.8
Insurance	2.2	2.1
Other administrative costs	2.2	2.9
	<b>24.7</b>	<b>21.8</b>

Swissgrid plans to move into its new headquarters in Aarau in mid-2018. The current locations in Frick and Laufenburg will be vacated at this time. Swissgrid will have to dismantle various tenant improvements before returning possession of these two locations to their landlords. To cover the cost of this work, Swissgrid has included a dismantling provision of CHF 0.6 million in rental and occupancy costs.

Board of Directors fees and expenses represent fixed gross remuneration. The remuneration paid to the Chairman of the Board of Directors amounted to CHF 250,000, incl. lump-sum expenses (previous year: CHF 250,000). The remaining members of the Board of Directors received remuneration of between CHF 55,000 and 70,000 pro rata temporis for 2016, incl. lump-sum expenses (previous year: CHF 55,000 to CHF 70,000).

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

## 10. FINANCIAL INCOME

In millions of CHF	2016	2015
Interest income	-	-
Other financial income	0.7	0.2
	<b>0.7</b>	<b>0.2</b>

Other financial income includes a dividend of CHF 0.5 million (previous year: CHF 0.0 million) from Holding des Gestionnaires de Réseau de Transport d'Électricité SAS (HGRT).

## 11. FINANCIAL EXPENSES

In millions of CHF	2016	2015
Bond interest	10.3	10.2
Loans and convertible loans interest	33.1	32.1
Commitment fees	0.5	0.5
Other financial expenses	0.7	1.2
	<b>44.6</b>	<b>44.0</b>

## 12. INCOME TAXES

In millions of CHF	2016	2015
Current income taxes	23.3	22.2
Change in deferred taxes	- 1.1	- 0.6
	<b>22.2</b>	<b>21.6</b>

The average tax rate based on the ordinary result amounts to 20.4% (previous year: 20.3%).



## 13. NON-CURRENT ASSETS

### SUMMARY OF PROPERTY, PLANT AND EQUIPMENT - 2016

In millions of CHF	Advances and construction in progress	Substations	Lines	Properties and buildings	Other property, plant and equipment	Total
Acquisition cost at 1.1.2016	205.4	1,775.2	2,398.3	163.0	51.2	4,593.1
Additions <sup>1</sup>	149.7	30.5	46.5	0.2	1.2	228.1
Disposals	-	- 29.0	- 2.9	- 0.3	- 1.7	- 33.9
Reclassification	- 52.2	51.5	3.6	2.1	4.6	9.6
Acquisition cost at 31.12.2016	302.9	1,828.2	2,445.5	165.0	55.3	4,796.9
Accumulated depreciation and amortisation at 1.1.2016	4.9	1,009.8	1,392.5	68.9	44.8	2,520.9
Depreciation and amortisation	-	59.7	43.5	4.0	6.4	113.6
Impairment losses	-	-	-	-	-	-
Disposals	-	- 29.0	- 2.9	- 0.3	- 1.7	- 33.9
Reclassification	-	-	-	-	-	-
Accumulated depreciation and amortisation at 31.12.2016	4.9	1,040.5	1,433.1	72.6	49.5	2,600.6
Net book value at 1.1.2016	200.5	765.4	1,005.8	94.1	6.4	2,072.2
<b>Net book value at 31.12.2016</b>	<b>298.0</b>	<b>787.7</b>	<b>1,012.4</b>	<b>92.4</b>	<b>5.8</b>	<b>2,196.3</b>

### SUMMARY OF PROPERTY, PLANT AND EQUIPMENT - 2015

In millions of CHF	Advances and construction in progress	Substations	Lines	Properties and buildings	Other property, plant and equipment	Total
Acquisition cost at 1.1.2015	161.3	1,425.6	2,005.5	131.1	47.0	3,770.5
Addition transfer of transmission system as of 5.1.2015	44.0	208.7	329.2	20.5	-	602.4
Additions net <sup>1</sup>	62.3	12.8	7.7	1.5	0.5	84.8
Disposals	-	-	- 0.1	- 0.1	- 1.1	- 1.3
Reclassification	- 62.2	128.1	56.0	10.0	4.8	136.7
Acquisition cost at 31.12.2015	205.4	1,775.2	2,398.3	163.0	51.2	4,593.1
Accumulated depreciation and amortisation at 1.1.2015	-	849.6	1,151.6	60.0	38.1	2,099.3
Addition transfer of transmission system as of 5.1.2015	-	92.1	175.9	4.7	-	272.7
Depreciation and amortisation	-	47.0	42.1	3.6	7.8	100.5
Impairment losses	4.9	-	-	-	-	4.9
Disposals	-	-	-	- 0.1	- 1.1	- 1.2
Reclassification	-	21.1	22.9	0.7	-	44.7
Accumulated depreciation and amortisation at 31.12.2015	4.9	1,009.8	1,392.5	68.9	44.8	2,520.9
Net book value at 1.1.2015	161.3	576.0	853.9	71.1	8.9	1,671.2
<b>Net book value at 31.12.2015</b>	<b>200.5</b>	<b>765.4</b>	<b>1,005.8</b>	<b>94.1</b>	<b>6.4</b>	<b>2,072.2</b>

<sup>1</sup> In 2016, Swissgrid acquired additional tangible assets as part of the transmission system amounting to CHF 45.1 million and remunerated this amount 30% in shares and 70% in loans.

In the reporting year, project costs of CHF 9.6 million (previous year: CHF 0.0 million) were reclassified from intangible assets under development to construction in progress.

Gross investments in property, plant and equipment amounted to CHF 183.0 million (previous year: CHF 115.8 million). In the reporting year, no investments (previous year: CHF 31.0 million) were financed by proceeds from the auctioning of bottleneck capacities for cross-border supplies.

Property, plant and equipment of CHF 43.9 million (previous year: CHF 38.5 million) was purchased from related parties in 2016 (excl. the acquisition of assets as at 4 January 2016).

## SUMMARY OF INTANGIBLE ASSETS - 2016

In millions of CHF	Intangible assets under development			Usage rights		
	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
Acquisition cost at 1.1.2016	82.2	25.1	107.3	100.4	-	100.4
Additions <sup>1</sup>	16.4	8.2	24.6	2.8	-	2.8
Disposals	-	-	-	-0.4	-	-0.4
Reclassification	-49.1	-9.6	-58.7	31.6	-	31.6
Acquisition cost at 31.12.2016	49.5	23.7	73.2	134.4	-	134.4
Accumulated depreciation and amortisation at 1.1.2016	5.4	0.7	6.1	50.4	-	50.4
Depreciation and amortisation	-	-	-	3.9	-	3.9
Impairment losses	-	-	-	-	-	-
Disposals	-	-	-	-0.4	-	-0.4
Reclassification	-	-	-	-	-	-
Accumulated depreciation and amortisation at 31.12.2016	5.4	0.7	6.1	53.9	-	53.9
Net book value at 1.1.2016	76.8	24.4	101.2	50.0	-	50.0
<b>Net book value at 31.12.2016</b>	<b>44.1</b>	<b>23.0</b>	<b>67.1</b>	<b>80.5</b>	<b>-</b>	<b>80.5</b>

## SUMMARY OF INTANGIBLE ASSETS - 2015

In millions of CHF	Intangible assets under development			Usage rights		
	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
Acquisition cost at 1.1.2015	67.7	15.9	83.6	229.2	-	229.2
Addition transfer of transmission system as of 5.1.2015	0.4	-	0.4	2.1	-	2.1
Additions	23.4	10.1	33.5	2.2	-	2.2
Disposals	-	-	-	-	-	-
Reclassification	-9.3	-0.9	-10.2	-133.1	-	-133.1
Acquisition cost at 31.12.2015	82.2	25.1	107.3	100.4	-	100.4
Accumulated depreciation and amortisation at 1.1.2015	5.4	0.7	6.1	89.3	-	89.3
Depreciation and amortisation	-	-	-	5.8	-	5.8
Impairment losses	-	-	-	-	-	-
Disposals	-	-	-	-	-	-
Reclassification	-	-	-	-44.7	-	-44.7
Accumulated depreciation and amortisation at 31.12.2015	5.4	0.7	6.1	50.4	-	50.4
Net book value at 1.1.2015	62.3	15.2	77.5	139.9	-	139.9
<b>Net book value at 31.12.2015</b>	<b>76.8</b>	<b>24.4</b>	<b>101.2</b>	<b>50.0</b>	<b>-</b>	<b>50.0</b>

<sup>1</sup> In 2016, Swissgrid acquired additional intangible assets as part of the transmission system amounting to CHF 0.2 million and remunerated this amount 30% in shares and 70% in loans.

Gross investments in intangible assets amounted to CHF 29.7 million (previous year: CHF 39.3 million). Of this amount, no investments (previous year: CHF 0.8 million) were financed by proceeds from the auctioning of bottleneck capacities for cross-border supplies.

Software			Technical regulations			Total intangible assets		
Purchased	Self-constructed	Total	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
87.9	17.3	105.2	-	-	-	270.5	42.4	312.9
1.9	0.6	2.5	-	-	-	21.1	8.8	29.9
- 13.4	- 2.0	- 15.4	-	-	-	- 13.8	- 2.0	- 15.8
11.3	6.2	17.5	-	-	-	- 6.2	- 3.4	- 9.6
87.7	22.1	109.8	-	-	-	271.6	45.8	317.4
75.2	14.2	89.4	-	-	-	131.0	14.9	145.9
11.4	2.8	14.2	-	-	-	15.3	2.8	18.1
-	-	-	-	-	-	-	-	-
- 13.4	- 2.0	- 15.4	-	-	-	- 13.8	- 2.0	- 15.8
-	-	-	-	-	-	-	-	-
73.2	15.0	88.2	-	-	-	132.5	15.7	148.2
12.7	3.1	15.8	-	-	-	139.5	27.5	167.0
<b>14.5</b>	<b>7.1</b>	<b>21.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>139.1</b>	<b>30.1</b>	<b>169.2</b>

Software			Technical regulations			Total intangible assets		
Purchased	Self-constructed	Total	Purchased	Self-constructed	Total	Purchased	Self-constructed	Total
81.2	15.4	96.6	43.8	2.3	46.1	421.9	33.6	455.5
-	-	-	-	-	-	2.5	-	2.5
2.3	0.5	2.8	-	-	-	27.9	10.6	38.5
- 0.8	-	- 0.8	- 43.8	- 2.3	- 46.1	- 44.6	- 2.3	- 46.9
5.2	1.4	6.6	-	-	-	- 137.2	0.5	- 136.7
87.9	17.3	105.2	-	-	-	270.5	42.4	312.9
65.2	12.0	77.2	43.8	2.3	46.1	203.7	15.0	218.7
10.8	2.2	13.0	-	-	-	16.6	2.2	18.8
-	-	-	-	-	-	-	-	-
- 0.8	-	- 0.8	- 43.8	- 2.3	- 46.1	- 44.6	- 2.3	- 46.9
-	-	-	-	-	-	- 44.7	-	- 44.7
75.2	14.2	89.4	-	-	-	131.0	14.9	145.9
16.0	3.4	19.4	-	-	-	218.2	18.6	236.8
<b>12.7</b>	<b>3.1</b>	<b>15.8</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>139.5</b>	<b>27.5</b>	<b>167.0</b>

In 2016, services for intangible assets of CHF 1.2 million (previous year: CHF 0.4 million) were purchased from related parties (excl. takeover of assets as at 4 January 2016).

## 14. FINANCIAL ASSETS

In millions of CHF	31.12.2016	31.12.2015
Investments	8.3	8.2
Employer contribution reserves	2.0	1.8
	<b>10.3</b>	<b>10.0</b>

Swissgrid has the following investments, which are recognised in the balance sheet as financial assets:

		Share capital in m.	Share in %
CESOC AG	A	0.100	50.0
Joint Allocation Office (JAO)	B	4.000	5.0
TSCNET Services GmbH	C	0.033	7.7
Holding des Gestionnaires de Réseau de Transport d'Électricité SAS (HGRT)	D	52.119	5.0
AET NE1 SA	A	0.100	100.0
ALENA Aletsch Energie Netz AG	A	0.100	100.0
Alpiq Netz AG Gösgen/Laufenburg	A	0.100	100.0
Alpiq Réseau SA Lausanne/Laufenburg	A	0.100	100.0
BKW Übertragungsnetz AG	A	0.100	100.0
CKW Grid AG	A	0.100	100.0
EGL Grid AG	A	0.100	100.0
ewb Übertragungsnetz AG	A	0.100	100.0
ewz Übertragungsnetz AG	A	0.100	100.0
FMV Réseau SA	A	0.100	100.0
Kraftwerke Hinterrhein Netz AG	A	0.100	100.0
LENA Lonza Energie Netz AG	A	0.100	100.0
Nordostschweizerische Kraftwerke Grid AG	A	0.100	100.0
Ofible Rete SA	A	0.100	100.0
Ofima Rete SA	A	0.100	100.0
Repower Transportnetz AG	A	0.100	100.0
SN Übertragungsnetz AG	A	0.100	100.0
Übertragungsnetz Basel/Laufenburg AG	A	0.100	100.0

Letters used for locations and currencies:

A = Laufenburg (CH) | Currency: CHF

B = Luxembourg (Lux) | Currency: EUR

C = Munich (D) | Currency: EUR

D = Paris (F) | Currency: EUR

The information has not changed since the previous year.

## 15. VOLUME-AND TARIFF-RELATED TIMING DIFFERENCES

In millions of CHF	Grid utilisation	General ancillary services/ balance energy	Active power losses (individual ancillary services)	Reactive energy (individual ancillary services)	Balance groups	Total volume- and tariff-related timing differences	Thereof surpluses	Thereof deficits
Balance at 31.12.2014	373.2	67.3	- 20.6	45.5	38.2	503.6	- 20.6	524.2
Transfer	-	38.2	-	-	- 38.2	-	-	-
Takeover of a grid company as of 5.1.2015	7.6	-	-	-	-	7.6	-	-
Change in 2015	35.8	- 126.5	2.1	1.2	-	- 87.4	-	-
Balance at 31.12.2015	416.6	- 21.0	- 18.5	46.7	-	423.8	- 39.5	463.3
Change in 2016	8.5	- 22.9	- 0.3	- 1.7	-	- 16.4	-	-
<b>Balance at 31.12.2016</b>	<b>425.1</b>	<b>- 43.9</b>	<b>- 18.8</b>	<b>45.0</b>	<b>-</b>	<b>407.4</b>	<b>- 62.7</b>	<b>470.1</b>
Current portion	101.9	-	- 5.0	37.1	-	134.0	- 5.0	139.0

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

As of the 2015 financial year, the balance groups are no longer managed as a separate segment. Accordingly, in the previous year, the deficit of CHF 38.2 million existing on 31 December 2014 was transferred to the general ancillary services/balance energy segment.

## 16. BALANCE SHEET ITEMS HELD ON FIDUCIARY BASIS

On the basis of a statutory mandate, Swissgrid coordinates the auctioning of bottleneck capacities for cross-border supplies and maintains accounting records and bank accounts on a fiduciary basis for this purpose.

### ASSETS HELD ON FIDUCIARY BASIS

In millions of CHF	31.12.2016	31.12.2015
Trade accounts receivable	19.1	13.3
Other receivables <sup>1</sup>	1.2	-
Prepaid expenses and accrued income	-	0.3
Cash and cash equivalents	14.1	332.4
	<b>34.4</b>	<b>346.0</b>

### LIABILITIES HELD ON FIDUCIARY BASIS

In millions of CHF	31.12.2016	31.12.2015
Trade accounts payable	10.3	10.9
Other liabilities	-	2.4
Accrued expenses and deferred income	24.1	332.7
	<b>34.4</b>	<b>346.0</b>

<sup>1</sup> Forward transactions have been used to partially hedge the EUR/CHF currency risk since mid-2015. Forward transaction contracts are carried at their current values upon initial recognition and valued based on the same principles as the hedged underlying transaction (EUR 74.0 million). The positive replacement values as at 31 December 2016 amount to CHF 1.0 million (previous year: negative replacement values of CHF 2.4 million).

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

In millions of CHF	2016	2015
Share of revenue Switzerland	124.0	135.0
Auction expense Swissgrid and third parties	- 8.4	- 10.1
Net proceeds	115.6	124.9
Used for reduction of the chargeable grid costs	- 99.9	0.0
Undistributed income from auctions	15.7	124.9

Pursuant to the ElCom ruling issued on 20 October 2016, CHF 433.8 million in income from auctions from 2013 to 2016 was paid to Swissgrid in the financial year to cover the chargeable costs of the transmission system. CHF 15.7 million in undistributed income from auctions collected by Swissgrid in 2016 to cover the chargeable costs of the transmission system will be carried forward to 2017.

## 17. TRADE RECEIVABLES

In millions of CHF	31.12.2016	31.12.2015
Trade receivables	173.6	158.7
Specific valuation allowances	- 0.1	- 0.1
	<b>173.5</b>	<b>158.6</b>

## 18. OTHER RECEIVABLES

In millions of CHF	31.12.2016	31.12.2015
Security deposits on blocked bank accounts	5.6	3.3
Other	0.1	0.1
	<b>5.7</b>	<b>3.4</b>

## 19. PREPAID EXPENSES AND ACCRUED INCOME

In millions of CHF	31.12.2016	31.12.2015
Accrued revenue for supplies made	39.4	45.2
Other	4.1	4.8
	<b>43.5</b>	<b>50.0</b>

In particular, other prepaid expenses and accrued income contains the discount on bond issues and financing and issue costs, which are amortised over the term of the financing instrument.

## 20. CASH AND CASH EQUIVALENTS

On 31 December 2016, cash and cash equivalents were provided so that on 3 January 2017 payments could be made toward the remuneration owed under the ECom ruling issued on 20 October 2016 (cf. Note 4).

## 21. FINANCIAL LIABILITIES

In millions of CHF	31.12.2016	31.12.2015
Bonds	850.0	850.0
Convertible loans	862.1	846.2
Loans	–	25.0
<b>Total financial liabilities</b>	<b>1,712.1</b>	<b>1,721.2</b>
Current portion	–	25.0

### BONDS

Nominal amount in CHF	Interest rate	Term	Expiry at nominal value
350 million	1.000%	2013–2020	30.1.2020
350 million	1.625%	2013–2025	30.1.2025
150 million	0.625%	2015–2030	21.2.2030

### CONVERTIBLE LOANS

Convertible loans have a term of 9 years and 1/5 of the loans become payable annually from year 5. Moreover, loans are also assigned a conversion right by Swissgrid in the event of occurrence of contractually defined events and an associated conversion obligation by the creditors. Creditors are compensated by a premium on the interest rate for the conversion right assigned to Swissgrid. Convertible loans are recognised in full in liabilities and assessed at their nominal values.

The interest conditions and maturities of convertible loans are as follows:

Category	Interest rate (bandwidth)	Year 1	Year 2 - 5	More than 5 years
Convertible loans	3.405% - 3.93%	–	629.1	233.0

### LINES OF CREDIT

The committed lines of credit total CHF 325 million and remain unclaimed as of 31 December 2016.

## 22. PROVISIONS

In millions of CHF	Restructuring	Dismantling	Employee incentive plan	Procedural costs	Deferred taxes	Total provisions
Balance at 31 December 2014	-	-	2.8	4.5	37.0	44.3
Provisions raised	7.5	6.1	0.2	0.9	-	14.7
Provisions used	1.4	-	2.8	0.7	0.6	5.5
Dissolving	-	-	-	0.8	-	0.8
Balance at 31 December 2015	6.1	6.1	0.2	3.9	36.4	52.7
Provisions raised	-	0.6	0.2	0.9	-	1.7
Provisions used	2.8	-	0.1	0.6	1.1	4.6
Dissolving	-	-	-	0.8	-	0.8
<b>Balance at 31 December 2016</b>	<b>3.3</b>	<b>6.7</b>	<b>0.3</b>	<b>3.4</b>	<b>35.3</b>	<b>49.0</b>
Current portion	1.4	-	0.1	1.9	-	3.4

### PROCEDURAL COSTS

With the grid takeovers on 3 January 2013 and 5 January 2015 and the associated spin-offs of the procedural companies from the grid companies, contractual regulations mean that Swissgrid is responsible for the costs of proceedings attributable to the procedural companies. The provision corresponds to Swissgrid's expected future expenses for party, court and legal costs that may arise for the procedural companies as part of their administrative procedures in conducting proceedings.

The provision amount also includes the estimated compensation payable to parties and the court costs imposed on Swissgrid due to the administrative procedures in conducting proceedings.

The large number of proceedings as well as the complex subject matters of the proceedings means that numerous reassessments are required over time, which influence the provision amount as well as the provisions raised, dissolved and the expected current portion within the statement of provisions.



## 23. TRADE ACCOUNTS PAYABLE

The remuneration owed under the ElCom ruling issued on 20 October 2016 caused trade accounts payable to increase sharply as of 31 December 2016 (cf. Note 4).

## 24. OTHER LIABILITIES

In millions of CHF	31.12.2016	31.12.2015
Value added tax	4.5	8.2
Security deposits on blocked bank accounts	4.7	2.9
Other	3.1	4.0
	<b>12.3</b>	<b>15.1</b>

The other liabilities item contains withholding tax on interest payments of CHF 2.8 million (previous year: CHF 2.9 million).

## 25. ACCRUED EXPENSES AND DEFERRED INCOME

In millions of CHF	31.12.2016	31.12.2015
Accrued expenses for supplies made	99.9	68.2
Personnel expenses and employees' insurance scheme	12.0	10.3
Accrued interest and premium from issued bonds	10.9	11.0
Taxes	18.5	22.5
	<b>141.3</b>	<b>112.0</b>

## 26. CONTINGENT RECEIVABLES AND CONTINGENT LIABILITIES

### BILLING METHOD FOR AS AND ENG SURCHARGES

ElCom provided a refined billing method for AS tariffs and Energy Act (EnG) surcharges in its 3/2016 directive on the billing method for AS and EnG surcharges. Under the new method, Swissgrid and the distribution system operators wait until the subsequent year to finally settle payments of AS tariffs for any particular financial year. The 2016 financial year is the first year covered by this method.

The settlement will result in receivables owed to Swissgrid by the distribution system operators. However, since the amount of these receivables could not be reliably determined when the financial statements were prepared, they were recognised as contingent receivables. The final settlement of EnG surcharges will be handled by the CRF Foundation and the distribution system operators.

### GUARANTEES ISSUED

Swissgrid issues formal risk guarantees for geothermal projects. 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. As of 31 December 2016, there were guarantees totalling CHF 56.6 million (previous year: CHF 8.8 million) in favour of AGEPP SA (CHF 8.8 million) and Geo-Energie Suisse AG (CHF 47.8 million).

## 27. OTHER OFF-BALANCE-SHEET COMMITMENTS

### GRID COSTS

As stipulated by ElCom, the former owners are entitled to chargeable operating and capital costs from the period between 2009 until the transfer date for the grid elements included in the transmission system. Several parties to the proceedings have appealed against the relevant ElCom rulings in the competent courts. Moreover, several former owners have submitted applications to ElCom for the official stipulation of the asset value and the previously undeclared operating and capital costs.

For these reasons, no final cost can be specified on the balance-sheet date. Swissgrid has recognised the grid costs stipulated for each year in its financial statements. A reliable assessment of the additional grid costs is not possible. The operating and capital costs to be remunerated could range between CHF 80.0 million and CHF 120.0 million.

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 periods. They do not have any direct impact on Swissgrid's results.

#### ASSESSED TRANSACTION VALUE FOR THE TRANSMISSION SYSTEM

The ElCom ruling issued on 20 October 2016 definitively established the method for determining the assessed value of the transmission system. The first payment based on this method was made on 3 January 2017. The final remuneration owed under this method cannot be determined until all valuation proceedings related to valuation adjustment 2 have been finally adjudicated. The financial consequences are difficult to estimate at this time. However, the outcome of the proceedings has no direct impact on Swissgrid's income.

#### JOINT ALLOCATION OFFICE (JAO)

As a shareholder of the Joint Allocation Office (JAO), Swissgrid is contractually obliged to assume its share of the annual costs.

#### TSCNET SERVICES GMBH

As a shareholder of TSCNET Services GmbH, Swissgrid is contractually obliged to assume its 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 2-10	More than 10 years	Total
31.12.2016	4.8	80.8	43.2	128.8
31.12.2015	4.7	76.2	45.3	126.2

The long-term rental obligations primarily include the future rental commitments based on the rental contract concluded in 2014 for the new Swissgrid head office in Aarau. The new location in the direct vicinity of the railway station supports the corporate strategy and a move is expected by mid-2018. The current locations in Frick and Laufenburg will be vacated at this time.

#### 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 2-5	Total
31.12.2016	0.3	0.2	0.5
31.12.2015	0.3	0.3	0.6

## 28. EMPLOYEE PENSION PLAN

Employer contribution reserve	Nominal value	Renounced use	Balance sheet	Formation of employer contribution reserve		Result from REC in personnel expenses	
				Balance sheet		2016	2015
In millions of CHF	31.12.2016	pro 2016	31.12.2016	pro 2016	31.12.2015		
Pension fund (PKE)	2.0	-	2.0	-	1.8	0.2	0.2
<b>Total</b>	<b>2.0</b>	<b>-</b>	<b>2.0</b>	<b>-</b>	<b>1.8</b>	<b>0.2</b>	<b>0.2</b>

Economic benefit/economic obligation and retirement benefit plan expenses	Shortfall/surplus funding	Economic share of the organisation	Change compared with previous year/ affecting income in FY	Accrued contributions	Pension benefit expenses within personnel expenses		
					2016	2015	
In millions of CHF	31.12.2016	31.12.2016	31.12.2015				
Pension fund without shortfall/surplus funding (PKE)	-	-	-	-	6.5	6.5	6.6
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.5</b>	<b>6.5</b>	<b>6.6</b>

Swissgrid is affiliated to a collective plan by the pension fund PKE Vorsorgestiftung Energie. Therefore, an economic benefit or economic obligation cannot be determined on the basis of the individual contract. The coverage ratio of the collective plan is 115,5% as of 31 December 2016 (previous year: 110,7%).

## 29. TRANSACTIONS WITH RELATED PARTIES

Transactions with related parties in millions of CHF	2016	2015
<b>Total operating activities</b>		
Net turnover	397.3	419.2
thereof grid utilisation	296.3	292.7
thereof general ancillary services (AS)/balance energy	59.0	85.4
thereof active power losses	27.3	31.9
thereof reactive energy	14.7	9.2
Other operating income	1.1	1.3
<b>Procurement costs and operating expenses</b>		
Procurement costs	611.3	198.0
thereof grid utilisation	388.6	21.5
thereof general ancillary services (AS)/balance energy	180.0	141.4
thereof active power losses	10.8	4.9
thereof reactive energy	31.9	30.2
Cost of materials and third-party supplies	28.5	33.2
Other operating expenses	4.4	3.3
<b>Financial result</b>		
Financial expenses	17.6	18.4

Unsettled balances at balance sheet date with related parties in millions of CHF	2016	2015
<b>Assets</b>		
Trade receivables	79.7	80.6
Prepaid expenses and accrued income	12.9	13.8
<b>Liabilities</b>		
Convertible loans and loans	365.3	476.5
Trade accounts payable	417.3	43.0
Accrued expenses and deferred income	45.9	46.5

The conditions relating to related parties are described in Note 1.

## 30. EVENTS AFTER THE BALANCE SHEET DATE

There are no events subsequent to the balance sheet date which would require disclosure or recognition in the 2016 financial statements.

On 5 April 2017, the Board of Directors of Swissgrid Ltd approved the 2016 financial statements for submission to the Annual General Meeting of shareholders and for publication.



# Independent Auditor's Report

To the General Meeting of Swissgrid Ltd, Laufenburg

## Opinion

We have audited the financial statements of Swissgrid Ltd, which comprise the balance sheet as at 31 December 2016, the statement of income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion the financial statements (pages 33 to 60) give a true and fair view of the financial position of the Company as at 31 December 2016, and its results of operations and its cash flows for the year then ended in accordance with Swiss GAAP FER.

## Basis for Opinion

We conducted our audit in accordance with Swiss Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight Authority



Accuracy of the calculation of the regulated EBIT and volume- and tariff-related timing differences



Completeness and accuracy of the net turnover and procurement costs



Correct recording of investments in property, plant and equipment

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.



## Accuracy of the calculation of the regulated EBIT and volume- and tariff-related timing differences

### Key Audit Matter

For the 2016 financial year Swissgrid reports an EBIT (earnings before interest and taxes) of CHF 158.0 million. The change in volume- and tariff-related timing differences amounts to CHF -16.4 million.

The EBIT presented in Swissgrid's financial statements is legally defined as the multiplication of the invested operating assets (regulatory asset base, "RAB") by the applicable regulatory interest rates plus taxes. The RAB consists of the transmission grid assets (incl. construction in progress), the intangible assets, the net current assets determined on a monthly basis and the accumulated volume- and tariff-related timing differences.

Cost and volume variances between the actual costs and income for a year and the costs and income pre-determined in advance at tariff level for the same year lead to so-called volume- and tariff-related timing differences. These are deferred separately as surpluses or deficits in the balance sheet and must be amortised over the coming years. The yearly change is recorded separately in the income statement under "Change in volume- and tariff-related timing differences".

There is a risk that the EBIT and the volume- and tariff-related timing differences are not calculated according to the applicable legal and regulatory provisions and that, consequently, the EBIT and the volume- and tariff-related timing differences are not presented correctly in the financial statements.

For further information on the calculation of the regulated EBIT and volume- and tariff-related timing differences refer to the notes of the financial statements Swiss GAAP FER under note "1. Accounting principles" (paragraph Activities according to StromVG) and under note "4. Segment reporting" (paragraph Change in volume- and tariff-related timing differences per segment).

### Our response

We have performed mainly the following audit procedures:

- Identification of the key controls and verification of their effectiveness using sampling;
- Reconciliation of the method used for calculating the regulated EBIT and volume- and tariff-related timing differences with the legal, administrative and regulatory requirements;
- Recalculation of the interest on the various components of the RAB using the interest rates according to the legal base (StromVG/StromVV) as well as to the decisions and directives of the Swiss Federal Electricity Commission (EiCom) and comparison with the recorded values;
- Evaluation of the completeness and transparency of the disclosures presented in the financial statements.



### Completeness and accuracy of the net turnover and procurement costs

#### Key Audit Matter

For the 2016 financial year Swissgrid reports a net turnover of CHF 1,250.8 million and the procurement costs amount to CHF 767.3 million.

The calculation of the net turnover (performance) and procurement costs is based mainly on the energy data directly metered on the transmission system or reported from downstream grid levels. For the measurement of performance, regulated tariffs must mainly be taken into account; for the procurement costs the applicable market prices.

Swissgrid's regulated activities are characterized by a high volume of IT-based transactions.

For certain turnover and procurement costs positions, no volume base exists at the closing date yet, which requires to make estimates and assumptions.

Due to the transaction volume, the various IT-interfaces and the estimates / assumptions, there is a risk that the performance and costs are not calculated completely and correctly.

For further information on the net turnover and the procurement costs refer to the notes of the financial statements Swiss GAAP FER under note "2. Estimation uncertainty" and under note "4. Segment reporting" (paragraph Segment report 2016) as well as under note "5. Net turnover and procurement costs according to the electricity supply act (StromVG)".

#### Our response

We have analyzed the process relative to the calculation of the net turnover and procurement costs and we have determined whether the energy data have been recorded completely and correctly. In this respect, we have among others identified the key controls and we have then verified their effectiveness using sampling. We have considered the high degree of integration of the provision and recording of services by the various IT-systems by testing the effectiveness of the general IT-controls and application controls of the relevant IT-systems for accounting purposes with the assistance of our IT-specialists.

In order to assess the completeness and accuracy, we have also critically examined the main assumptions and evaluated the accuracy of the forecasts regarding the presented accruals, in particular by comparing retrospectively the accrued amounts and the actual amounts.

Furthermore, we have assessed the appropriateness of the disclosures in the financial statements concerning the corresponding positions of the balance sheet and income statement.



## Correct recording of investments in property, plant and equipment

### Key Audit Matter

Property, plant and equipment used for operating activities and the related construction in progress cover approx. 63% (CHF 2,196.3 million) of total assets.

As part of the necessary modernization of the transmission grid in order to ensure the secure supply of electricity, investments aiming to optimize, reinforce and develop the transmission grid are of strategic importance for Swissgrid.

In this regard, there is among others a risk that the maintenance and repair costs that do not create additional value are capitalized in the balance sheet assets instead of being expensed in the income statement. Regarding construction in progress, there is also a risk that depreciations are not made from the moment when the item of property, plant and equipment is used.

For further information on property, plant and equipment refer to the notes of the financial statements Swiss GAAP FER under note "1. Accounting principles" (paragraph Property, plant and equipment) and under note "13. Non-current assets".

### Our response

We have performed mainly the following audit procedures:

- Identification of the key controls concerning property, plant and equipment and verification of the controls' effectiveness (including general IT-controls) using sampling;
- Evaluation whether the new investments recorded under construction in progress qualify for capitalization, using sampling, including reconciliation of the amounts capitalized with the invoices received and for the self-constructed assets with the corresponding detailed documents;
- Critical assessment of the moment of the transfer of completed projects / partial projects from construction in progress to the corresponding investment category;
- Analysis of the attribution of installations to the correct investment category and reconciliation of the attributed useful life with Swissgrid's finance manual.





### **Responsibility of the Board of Directors for the Financial Statements**

The Board of Directors is responsible for the preparation of the financial statements that give a true and fair view in accordance with Swiss GAAP FER, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Swiss Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.



We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

KPMG AG

Rolf Hauenstein  
Licensed Audit Expert

Patrizia Chanton  
Licensed Audit Expert

Basel, 5 April 2017

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# Statutory financial statements



## Income statement

In millions of CHF	Notes	2016	2015
Net turnover	3	1,250.8	837.7
Other operating income	4	18.2	17.4
Change in volume- and tariff-related timing differences		- 15.3	- 86.8
Capitalised self-constructed assets		13.6	14.3
<b>Total operating income</b>		<b>1,267.3</b>	<b>782.6</b>
Procurement costs	3	767.3	295.2
<b>Gross profit</b>		<b>500.0</b>	<b>487.4</b>
Cost of materials and third-party supplies	5	97.9	93.9
Personnel expenses	6	86.6	93.6
Other operating expenses	7	24.7	21.8
<b>Earnings before interest, income taxes, depreciation and amortisation</b>		<b>290.8</b>	<b>278.1</b>
Depreciation on property, plant and equipment		111.6	97.5
Amortisation on intangible assets		26.3	26.5
Impairment losses		-	4.9
<b>Earnings before interest and income taxes (EBIT)</b>		<b>152.9</b>	<b>149.2</b>
Financial income		0.7	0.2
Financial expenses		44.6	44.0
<b>Profit for the year before taxes</b>		<b>109.0</b>	<b>105.4</b>
Income taxes		23.3	22.2
<b>Profit for the year</b>		<b>85.7</b>	<b>83.2</b>

## Balance sheet - assets

In millions of CHF	Notes	31.12.2016	31.12.2015
Cash and cash equivalents	8	428.2	27.9
Trade accounts receivable	9	173.5	158.6
Other receivables		5.7	3.4
Inventory		2.1	2.9
Prepaid expenses and accrued income	10	43.5	50.0
Short-term deficits arising from volume-and tariff-related timing differences		139.0	190.6
Assets held on fiduciary basis	11	34.4	346.0
<b>Current assets</b>		<b>826.4</b>	<b>779.4</b>
Financial assets	12	2.0	1.8
Investments	13	8.3	8.2
Property, plant and equipment	14	2,090.0	1,963.8
Intangible assets	15	300.6	306.6
Long-term deficits arising from volume-and tariff-related timing differences		257.4	197.9
<b>Non-current assets</b>		<b>2,658.3</b>	<b>2,478.3</b>
<b>Assets</b>		<b>3,484.7</b>	<b>3,257.7</b>

## Balance sheet - equity and liabilities

In millions of CHF	Notes	31.12.2016	31.12.2015
Trade accounts payable	16	495.9	73.1
Current financial liabilities	19	-	25.0
Other liabilities	17	12.3	15.1
Accrued expenses and deferred income	18	141.3	112.0
Current provisions	20	3.4	4.2
Current surpluses arising from volume-and tariff-related timing differences		5.0	21.0
Liabilities held on fiduciary basis	11	34.4	346.0
<b>Current liabilities</b>		<b>692.3</b>	<b>596.4</b>
Non-current financial liabilities	19	1,712.1	1,696.2
Non-current provisions	20	10.3	12.1
Non-current surpluses arising from volume-and tariff-related timing differences		57.7	18.5
<b>Non-current liabilities</b>		<b>1,780.1</b>	<b>1,726.8</b>
<b>Liabilities</b>		<b>2,472.4</b>	<b>2,323.2</b>
Share capital	21	317.9	313.4
Legal capital reserves	21	402.9	393.9
Reserves from capital contributions		402.9	393.9
Legal retained earnings		1.6	1.6
General legal reserves		1.6	1.6
Voluntary retained earnings		289.9	225.6
Available earnings		289.9	225.6
Results carried forward		204.2	142.4
Profit for the year		85.7	83.2
<b>Equity</b>		<b>1,012.3</b>	<b>934.5</b>
<b>Equity and liabilities</b>		<b>3,484.7</b>	<b>3,257.7</b>

## Cash flow statement

In millions of CHF, excluding balance sheet items held on fiduciary basis	Notes	2016	2015
Profit for the year		85.7	83.2
Financial expenses		44.6	44.0
Financial income		- 0.7	- 0.2
Current income taxes		23.3	22.2
Depreciation and amortisation		137.9	123.9
Impairment losses		-	4.9
Gains/Losses on disposal of non-current assets		- 0.2	0.1
Change in employer contribution reserves	12	- 0.2	- 0.2
Change in provisions	20	- 2.6	9.0
Change in inventory		0.8	0.4
Change in trade accounts receivable		- 14.9	5.3
Change in other receivables		- 2.3	-
Change in prepaid expenses and accrued income		6.5	4.4
Change in volume- and tariff-related timing differences		15.3	86.8
Change in trade accounts payable		422.8	- 14.8
Change in other current liabilities		- 2.8	8.0
Change in accrued expenses and deferred income		32.2	13.2
Income taxes paid		- 26.8	- 20.3
<b>Cash flow from operating activities</b>		<b>718.6</b>	<b>369.9</b>
Gross investments in property, plant and equipment		- 183.0	- 115.8
Congestion proceeds received for grid investments		-	31.0
<b>Net investments in property, plant and equipment</b>		<b>- 183.0</b>	<b>- 84.8</b>
Divestment in property, plant and equipment		0.2	-
Gross investments in intangible assets		- 29.7	- 39.3
Congestion proceeds received for grid investments		-	0.8
<b>Net investments in intangible assets</b>		<b>- 29.7</b>	<b>- 38.5</b>
Investments in investments		- 0.1	- 5.2
Divestment in investments		-	0.2
Dividends received		0.5	-
<b>Cash flow from investing activities</b>		<b>- 212.1</b>	<b>- 128.3</b>
Change in current financial liabilities		- 40.8	- 319.6
Issuing of long-term bonds	19	-	150.0
Interest paid		- 43.9	- 41.9
Dividends paid		- 21.5	- 13.0
<b>Cash flow from financing activities</b>		<b>- 106.2</b>	<b>- 224.5</b>
<b>Change in cash and cash equivalents</b>		<b>400.3</b>	<b>17.1</b>
<b>Composition</b>			
Cash and cash equivalents at beginning of period		27.9	10.8
Cash and cash equivalents at end of period		428.2	27.9
<b>Change in cash and cash equivalents</b>		<b>400.3</b>	<b>17.1</b>



#### NON-CASH INVESTING AND FINANCING ACTIVITIES

The purchase consideration of CHF 45.3 million for the transfer of additional parts of the transmission system was settled 30% in Swissgrid shares and 70% in loans.

# Notes

## 1. ACCOUNTING PRINCIPLES

### GENERAL INFORMATION

The financial statements for Swissgrid Ltd, Laufenburg, have been prepared in accordance with the Swiss Law on Accounting and Financial Reporting (Title 32 of the Swiss Code of Obligations). The valuation principles applied are described below.

### CONVERSION OF FOREIGN CURRENCY POSITIONS

The accounting records are maintained in local currency (Swiss francs, CHF). All monetary assets and liabilities recognised in foreign currencies are converted at the exchange rate as of the balance sheet date. Transactions in foreign currencies are converted at the exchange rate on the day the transaction took place. Foreign exchange gains and losses resulting from transactions in foreign currencies are recognised in the income statement 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. The cash flow from operating activities is calculated using the indirect method.

### REVENUE RECOGNITION

Revenue is recognised in the income statement upon performance of Swissgrid's obligations. For activities regulated under the Federal Electricity Supply Act (StromVG), the measurement of performance is based mainly on energy data directly metered on the transmission system or reported from downstream grid levels.

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 ACCORDING TO STROMVG

**Volume- and tariff-related timing differences (surpluses and deficits):** according to Art. 14 StromVG, grid utilisation costs must be allocated to users on a user-pays basis. The tariffs for a financial year are determined based on planned costs. Due to price and volume deviations, actual expenses and income vary from the tariff calculation on both the revenue and procurement side. This results in surpluses or deficits, i.e. the tariff revenues from a financial year are higher or lower than the actual expenses 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. The expected reduction of the volume- and tariff-related timing differences within 12 months after the balance sheet date are recognised as short-term surpluses or deficits arising from volume- and tariff-related timing differences in the balance sheet.

**EBIT regulated under StromVG:** Earnings before interest and 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 plus taxes. Accordingly, operating assets consist of net current assets determined on a monthly basis and non-current assets as of the end of the financial year. The weighted average cost of capital rate (WACC) is based on the current international practice of the WACC capital cost concept with reference to the Capital Asset Pricing Model (CAPM). Besides considering the findings of financial market theory, the regulatory framework conditions in Switzerland and the current situation in the money and capital market are also taken into account. In 2016, the applied WACC based on this calculation is unchanged from the previous year at 4.70%.

The chargeability of Swissgrid's operating and capital costs for tariff-setting purposes is subject to approval by ElCom, which takes place ex post. In case of an ex post cost adjustment, an appeal can be lodged with the Federal Administrative Court. A cost adjustment impacting Swissgrid's operating result is applied whenever no appeal is lodged, or whenever an appeal's prospects for success are judged to be less than 50% on the basis of a reappraisal, or whenever a legally binding ruling is issued.

### PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is recognised at acquisition or production cost, less accumulated depreciation and amortisation and any impairment losses. Significant spare parts, which are likely to be used for a longer period and whose use only takes place in connection with a non-current asset item, are recognised in non-current assets and depreciated over the remaining useful life of the relevant system. Depreciation is calculated using the straight-line method on the basis of the estimated useful technical and economic lives of the assets. The useful life is determined as follows:

- Lines: 15 to 60 years
- Substations: 10 to 35 years
- Buildings and expansions: 5 to 50 years
- Other property, plant and equipment: 3 to 8 years
- Construction in progress and properties: only applicable in the case of impairment

### INTANGIBLE ASSETS

Intangible assets are recognised at acquisition or production cost less accumulated amortisation and any impairment losses. Amortisation is calculated using the straight-line method on the basis of the estimated useful technical and economic lives of the assets.

The useful life is determined as follows:

- Rights of use and easements: contract term
- Software and technical regulations: 3 to 5 years
- Intangible assets under development: only applicable in the case of impairment

The merger losses (goodwill) resulting from the mergers on 3 January 2013 and 5 January 2015 are also recognised in this item. Goodwill is depreciated on a straight-line basis over 20 years and is reviewed annually for impairments.

### IMPAIRMENT LOSSES

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, are classified as non-current assets. As of each balance sheet date, a review is performed to determine whether any assets under construction or intangible assets under development have to be impaired. These are recognised as impairment losses in the year of identification. Ordinary depreciation or amortisation of these assets begins once they are completed or ready for operation.

### FINANCIAL ASSETS

Financial assets are measured at acquisition costs less any adjustments for impairment. Employer contribution reserves without conditional renounced use are also recognised in financial assets.

### INVESTMENTS

Investments are measured at acquisition costs less any adjustments for impairment. These include investments that are controlled by Swissgrid, but which do not have a significant impact on the financial statements, as well as investments with a capital share of less than 20%.

### INVENTORY

Inventory includes waste material for maintaining the grid systems. Inventory is measured at the lower of acquisition cost or market price.

### ACCOUNTS RECEIVABLE

Accounts receivable are reported at their nominal value less any impairments 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 values.

### BONDS

Bonds issued on the capital market are recognised at their nominal value. Deviations from the nominal value in the case of below- or above-par issues are recognised as accruals and are reversed on a straight-line basis over the term of the bond.

### LIABILITIES

Liabilities are recognised at their nominal value.

### PROVISIONS

Provisions are 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 a utilisable inflow of funds is probable and capable of being estimated. 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.

### INCOME TAXES

Current income taxes are calculated based on the taxable results on an accruals basis.

## 2. ESTIMATION UNCERTAINTY

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/acrued 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. 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 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 "Activities according to StromVG" in Note 1 as well as the comments in the Note 25.

## 3. NET TURNOVER AND PROCUREMENT COSTS

### NET TURNOVER

Net turnover increased by a considerable 50% compared to the previous year, rising from CHF 837.7 million to CHF 1,250.8 million. Much of the increase in turnover came from CHF 433.8 million in income from auctioning bottleneck capacities at the national borders, which Swissgrid used to cover the chargeable costs of the transmission system in the reporting year, as set out in the ECom ruling, and allocated to the grid utilisation segment. In addition, the repeated rise in income attributable to higher grid usage tariffs in 2016 increased net turnover in this segment even more.

In contrast, net turnover in the general ancillary services segment maintained its downward trajectory from the previous year and declined CHF 65.1 million as the lower general ancillary services tariff fell even further. Net turnover in the other two individual ancillary service segments saw only marginal changes compared to the previous year.

### PROCUREMENT COSTS

Procurement costs were significantly affected by the 20 October 2016 ruling issued by ECom on the method for establishing the assessed value of the transmission system. The ruling was issued in connection with the transfer of the transmission system and all its associated equipment from its previous owners to Swissgrid. The remuneration paid to comply with the ruling increased procurement costs in the grid utilisation segment by CHF 417.4 million in the reporting year. Additional remuneration for operating and capital costs paid to former transmission system owners in this segment was CHF 19.0 million higher than in the same period of the previous year.

In the general ancillary services segment, procurement costs increased CHF 44.8 million year-on-year. This increase was driven by higher provision costs due to the strained energy and grid situation in the 2015/2016 winter season. Procurement costs in the individual ancillary services (active power loss and reactive energy) fell by CHF 7.4 million compared to the previous year. This is due to the lower procurement volume of active power losses.

As a result of these effects, procurement costs increased considerably year-on-year, rising from CHF 295.2 million to CHF 767.3 million.

More detailed comments on the individual segments, including the effects on the volume- and tariff-related timing differences, can be found in Note 4 in the financial statements in accordance with Swiss GAAP FER.

## 4. OTHER OPERATING INCOME

In millions of CHF	2016	2015
Handling the orders in accordance with the Energy Act	5.4	5.0
Auction clearing	7.7	9.1
Issuance of guarantees of origin for renewable energies	3.9	3.3
Other	1.2	-
	<b>18.2</b>	<b>17.4</b>

The handling of the orders in accordance with the Energy Act includes compensation for expenditures in connection with CRF (cost-covering remuneration for feed-in to the electricity grid), ACF (additional cost financing) and OR (one-off remuneration).

## 5. COST OF MATERIALS AND THIRD-PARTY SUPPLIES

In millions of CHF	2016	2015
Grid maintenance	25.9	14.0
Grid system control	10.7	12.2
Other services in the grid area	17.0	16.7
Expenses for projects, advisory and material	34.7	35.5
Dismantling of grid elements	-	6.1
Hardware/software maintenance	9.6	9.4
	<b>97.9</b>	<b>93.9</b>

The expense for grid maintenance increased significantly during the reporting period due to a year-on-year increase in maintenance costs.

Other services in the grid area particularly include easement management services performed by third parties and the operating expense for mixed-use systems.

## 6. PERSONNEL EXPENSES

In millions of CHF	2016	2015
Salaries, bonuses, allowances	70.4	68.9
Employee insurance	12.2	12.2
Other personnel expenses	4.0	5.0
Provision for restructuring	-	7.5
	<b>86.6</b>	<b>93.6</b>

Other personnel expenses include, in particular, allowances for external catering for employees, for training and further education, recruitment as well as lump-sum expenses.

The average number of full-time equivalents exceeded 250 in the reporting period, as was the case the previous year.

## 7. OTHER OPERATING EXPENSES

In millions of CHF	2016	2015
Rental and occupancy costs	7.2	5.9
Ground rents	1.5	1.0
Rental costs for communication equipment/telecommunication expense	3.9	4.1
Board of Directors fees and expenses, incl. social costs	0.8	0.8
Actual expenses for travel and subsistence for employees and third parties	1.9	2.2
Fees, dues and licences	5.0	2.8
Insurance	2.2	2.1
Other administrative costs	2.2	2.9
	<b>24.7</b>	<b>21.8</b>

Swissgrid plans to move into its new headquarters in Aarau in mid-2018. The current locations in Frick and Laufenburg will be vacated at this time. Swissgrid will have to dismantle individual tenant improvements before returning possession of these two locations to their landlords. To cover the cost of this work, Swissgrid has included a dismantling provision of CHF 0.6 million in rental and occupancy costs.

Board of Directors fees and expenses represent fixed gross remuneration. The remuneration paid to the Chairman of the Board of Directors amounted to CHF 250,000, incl. lump-sum expenses (previous year: CHF 250,000). The remaining Executive Board members received remuneration of between CHF 55,000 and 70,000 pro rata temporis for 2016, incl. lump-sum expenses (previous year: CHF 55,000 to CHF 70,000).

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

## 8. CASH AND CASH EQUIVALENTS

On 31 December 2016, cash and cash equivalents were provided so that on 3 January 2017 payments could be made toward the remuneration owed under the ECom ruling issued on 20 October 2016 (cf. Note 3).

## 9. TRADE RECEIVABLES

On 31 December 2016, trade receivables include CHF 70.9 million (previous year: CHF 68.6 million) vis-à-vis companies with a direct or indirect investment in Swissgrid.

## 10. PREPAID EXPENSES AND ACCRUED INCOME

In millions of CHF	31.12.2016	31.12.2015
Accrued revenue for supplies made	39.4	45.2
Other	4.1	4.8
	<b>43.5</b>	<b>50.0</b>

In particular, other prepaid expenses and accrued income contains the discount on bond issues and financing and issue costs, which are amortised over the term of the financing instrument.

## 11. BALANCE SHEET ITEMS HELD ON FIDUCIARY BASIS

Pursuant to the ECom ruling issued on 20 October 2016, CHF 433.8 million in income from auctions from 2013 to 2016 was paid to Swissgrid in the financial year to cover the chargeable costs of the transmission system. As a result, assets and liabilities held on a fiduciary basis reduced considerably.

## 12. FINANCIAL ASSETS

As in the previous year, financial assets contain the employer contribution reserves without renounced use of CHF 2.0 million (previous year: CHF 1.8 million).

## 13. INVESTMENTS

		Share capital in m.	Share in %
CESOC AG	A	0.100	50.0
Joint Allocation Office (JAO)	B	4.000	5.0
TSCNET Services GmbH	C	0.033	7.7
Holding des Gestionnaires de Réseau de Transport d'Électricité SAS (HGRT)	D	52.119	5.0
AET NE1 SA	A	0.100	100.0
ALENA Aletsch Energie Netz AG	A	0.100	100.0
Alpiq Netz AG Gösigen/Laufenburg	A	0.100	100.0
Alpiq Réseau SA Lausanne/Laufenburg	A	0.100	100.0
BKW Übertragungsnetz AG	A	0.100	100.0
CKW Grid AG	A	0.100	100.0
EGL Grid AG	A	0.100	100.0
ewb Übertragungsnetz AG	A	0.100	100.0
ewz Übertragungsnetz AG	A	0.100	100.0
FMV Réseau SA	A	0.100	100.0
Kraftwerke Hinterrhein Netz AG	A	0.100	100.0
LENA Lonza Energie Netz AG	A	0.100	100.0
Nordostschweizerische Kraftwerke Grid AG	A	0.100	100.0
Ofible Rete SA	A	0.100	100.0
Ofima Rete SA	A	0.100	100.0
Repower Transportnetz AG	A	0.100	100.0
SN Übertragungsnetz AG	A	0.100	100.0
Übertragungsnetz Basel/Laufenburg AG	A	0.100	100.0

Letters used for locations and currencies:

A = Laufenburg (CH) | Currency: CHF

B = Luxembourg (Lux) | Currency: EUR

C = Munich (D) | Currency: EUR

D = Paris (F) | Currency: EUR

The information has not changed since the previous year.

## 14. PROPERTY, PLANT AND EQUIPMENT

The book values of the individual categories are as follows:

In millions of CHF	31.12.2016	31.12.2015
Construction in progress	298.0	200.5
Substations	758.8	737.4
Lines	940.1	930.5
Properties and buildings	87.3	89.0
Other property, plant and equipment	5.8	6.4
	<b>2,090.0</b>	<b>1,963.8</b>

The increase in the reporting period is attributable to the high level of investment and the acquisition of grid assets as of 4 January 2016.

## 15. INTANGIBLE ASSETS

The book values of the individual categories are as follows:

In millions of CHF	31.12.2016	31.12.2015
Intangible assets under development	67.1	101.2
Usage rights	77.8	47.1
Software	21.6	15.8
Merger losses (Goodwill)	134.1	142.5
	<b>300.6</b>	<b>306.6</b>

Projects regarding remuneration for easement contracts were completed in the reporting period. The total project volume was over CHF 30.0 million. The corresponding intangible assets under development items were reclassified as usage rights.

## 16. TRADE ACCOUNTS PAYABLE

The remuneration owed under the ElCom ruling issued on 20 October 2016 caused trade accounts payable to increase sharply as of 31 December 2016 (cf. Note 3).

On 31 December 2016, trade accounts payable include CHF 347.9 million (previous year: CHF 22.9 million) vis-à-vis companies with a direct or indirect investment in Swissgrid and CHF 0.0 million (previous year: CHF 0.1 million) towards the auditors.

## 17. OTHER LIABILITIES

In millions of CHF	31.12.2016	31.12.2015
Value added tax	4.5	8.2
Security deposits on blocked bank accounts	4.7	2.9
Other	3.1	4.0
	<b>12.3</b>	<b>15.1</b>

The other liabilities item contains withholding tax on interest payments of CHF 2.8 million (previous year: CHF 2.9 million).

## 18. ACCRUED EXPENSES AND DEFERRED INCOME

In millions of CHF	31.12.2016	31.12.2015
Accrued expenses for supplies made	99.9	68.2
Personnel expenses and employees' insurance scheme	12.0	10.3
Accrued interest and premium from issued bonds	10.9	11.0
Taxes	18.5	22.5
	<b>141.3</b>	<b>112.0</b>

Personnel expenses and employees' insurance scheme include obligations of CHF 0.9 million toward PKE Vorsorgestiftung Energie as of 31 December 2016 (in the previous year, the CHF 0.9 million owed to PKE were included in other liabilities).

## 19. FINANCIAL LIABILITIES

In millions of CHF	31.12.2016	31.12.2015
Bonds	850.0	850.0
Convertible loans	862.1	846.2
Loans	-	25.0
<b>Total financial liabilities</b>	<b>1,712.1</b>	<b>1,721.2</b>
Current portion	-	25.0

### BONDS

Nominal amount in CHF	Interest rate	Term	Expiry at nominal value
350 million	1.000%	2013-2020	30.1.2020
350 million	1.625%	2013-2025	30.1.2025
150 million	0.625%	2015-2030	21.2.2030

### CONVERTIBLE LOANS

Convertible loans have a term of 9 years and 1/5 of the loans become payable annually from year 5. Moreover, loans are also assigned a conversion right by Swissgrid in the event of occurrence of contractually defined events and an associated conversion obligation by the creditors. Creditors are compensated by a premium on the interest rate for the conversion right assigned to Swissgrid. Convertible loans are recognised in full in liabilities and assessed at their nominal values.

The interest conditions and maturities of convertible loans are as follows:

Category	Interest rate (bandwidth)	Year 1	Year 2 - 5	More than 5 years
Convertible loans	3.405% - 3.93%	-	629.1	233.0

On 31 December 2016, convertible loans of CHF 480.6 million (previous year: CHF 473.5 million) and loans of CHF 0.0 million (previous year: CHF 15.0 million) exist towards companies with a direct or indirect investment in Swissgrid.

## 20. PROVISIONS

In millions of CHF	31.12.2016	31.12.2015
Restructuring	3.3	6.1
Dismantling	6.7	6.1
Employee incentive plan	0.3	0.2
Procedural costs	3.4	3.9
<b>Total provisions</b>	<b>13.7</b>	<b>16.3</b>
Current portion	3.4	4.2

### PROCEDURAL COSTS

With the grid takeovers on 3 January 2013 and 5 January 2015 and the associated spin-offs of the procedural companies from the grid companies, contractual regulations mean that Swissgrid is responsible for the costs of proceedings attributable to the procedural companies. The provision corresponds to Swissgrid's expected future expenses for party, court and legal costs that may arise for the procedural companies as part of their administrative procedures in conducting proceedings.

The provision amount also includes the estimated compensation payable to parties and the court costs imposed on Swissgrid due to the administrative procedures in conducting proceedings.

## 21. SHARE CAPITAL AND RESERVES FROM CAPITAL CONTRIBUTIONS

The share capital consists of 317 917 131 (previous year: 313 398 719) fully paid-up registered shares with a par value of CHF 1 per share.

The share capital has increased by a total of CHF 4.52 million, while the reserves from capital contributions have increased by a total of CHF 9.06 million as a consequence of the acquisition of additional parts of the transmission system on 4 January 2016.



## 22. CONTINGENT RECEIVABLES

### BILLING METHOD FOR AS AND ENG SURCHARGES

ElCom provided a refined billing method for AS tariffs and Energy Act (EnG) surcharges in its 3/2016 directive on the billing method for AS and EnG surcharges. Under the new method, Swissgrid and the distribution system operators wait until the subsequent year to finally settle payments of AS tariffs for any particular financial year. The 2016 financial year is the first year covered by this method.

The settlement will result in receivables owed to Swissgrid by the distribution system operators. However, since the amount of these receivables could not be reliably determined when the financial statements were prepared, they were recognised as contingent receivables. The final settlement of EnG surcharges will be handled by the CRF Foundation and the distribution system operators.

## 23. GUARANTEES ISSUED

Swissgrid issues formal risk guarantees for geothermal projects. 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. As of 31 December 2016, there were guarantees totalling CHF 56.6 million (previous year: CHF 8.8 million) in favour of AGEPP SA (CHF 8.8 million) and Geo-Energie Suisse AG (CHF 47.8 million).

## 24. OTHER OFF-BALANCE-SHEET COMMITMENTS

### GRID COSTS

As stipulated by ElCom, the former owners are entitled to chargeable operating and capital costs from the period between 2009 until the transfer date for the grid elements included in the transmission system. Several parties to the proceedings have appealed against the relevant ElCom rulings in the competent courts. Moreover, several former owners have submitted applications to ElCom for the official stipulation of the asset value and the previously undeclared operating and capital costs.

For these reasons, no final cost can be specified on the balance-sheet date. Swissgrid has recognised the grid costs stipulated for each year in its financial statements. A reliable assessment of the additional grid costs is not possible. The operating and capital costs to be remunerated could range between CHF 80.0 million and CHF 120.0 million.

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 periods. They do not have any direct impact on Swissgrid's results.

### ASSESSED TRANSACTION VALUE FOR THE TRANSMISSION SYSTEM

The ElCom ruling issued on 20 October 2016 definitively established the method for determining the assessed value of the transmission system. The first payment based on this method was made on 3 January 2017. The final remuneration owed under this method cannot be determined until all valuation proceedings related to valuation adjustment 2 have been finally adjudicated. The financial consequences are difficult to estimate at this time. However, the outcome of the proceedings has no direct impact on Swissgrid's income.

### JOINT ALLOCATION OFFICE (JAO)

As a shareholder of the Joint Allocation Office (JAO), Swissgrid is contractually obliged to assume its share of the annual costs.

### TSCNET SERVICES GMBH

As a shareholder of TSCNET Services GmbH, Swissgrid is contractually obliged to assume its share of the annual costs.

### 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 2-5	Total
31.12.2016	0.3	0.2	0.5
31.12.2015	0.3	0.3	0.6

## 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 2-10	More than 10 years	Total
31.12.2016	4.8	80.8	43.2	128.8
31.12.2015	4.7	76.2	45.3	126.2

The long-term rental obligations primarily include the future rental commitments based on the rental contract concluded in 2014 for the new Swissgrid head office in Aarau. The new location in the direct vicinity of the railway station supports the corporate strategy and a move is expected by mid-2018. The current locations in Frick and Laufenburg will be vacated at this time.

## 25. LEGAL PROCEEDINGS

The cumulative risk for non-chargeable costs amounts to CHF 194.2 million as of 31 December 2016 (previous year: CHF 164.0 million). Swissgrid's Board of Directors and Executive Board are of the opinion that all costs qualify as chargeable. Based on this assessment, Swissgrid has treated all operating and capital costs as chargeable and consequently recognised them in full in the volume- and tariff-related timing differences.

Detailed comments on the legal proceedings can be found in the financial statements prepared in compliance with Swiss GAAP FER in Note 3.

## 26. AUDIT FEES

In 2016, the fees for audit services amount to CHF 0.2 million (previous year: CHF 0.2 million) and CHF 0.1 million (previous year: CHF 0.1 million) for other services.

## 27. EVENTS AFTER THE BALANCE SHEET DATE

There are no events subsequent to the balance sheet date which would require disclosure or recognition in the 2016 financial statements.

On 5 April 2017, the Board of Directors of Swissgrid Ltd approved the 2016 financial statements for submission to the Annual General Meeting of shareholders and for publication.

## Proposed appropriation of available earnings

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

CHF	2016	2015
Balance carried forward from the previous year	204,215,678.38	142,448,838.80
Profit for the year	85,679,186.05	83,265,991.70
Retained earnings	289,894,864.43	225,714,830.50
Appropriation to the general legal reserves	-	-
Dividend payment	21,809,115.19	21,499,152.12
Balance to be carried forward	268,085,749.24	204,215,678.38
<b>Total appropriation</b>	<b>289,894,864.43</b>	<b>225,714,830.50</b>

Since legal capital reserves and legal retained earnings have reached 50% of the share capital, no more funds will be allocated to these accounts.

Laufenburg, 5 April 2017

For the Board of Directors:  
 Adrian Bult, Chairman



# Statutory Auditor's Report

To the General Meeting of Swissgrid Ltd, Laufenburg

## Report on the Audit of the Financial Statements

### Opinion

We have audited the financial statements of Swissgrid Ltd, which comprise the balance sheet as at 31 December 2016, the income statement and statement of cash flow for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion the financial statements (pages 69 to 83) for the year ended 31 December 2016 comply with Swiss law and the company's articles of incorporation.

### Basis for Opinion

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight Authority



Accuracy of the calculation of the regulated EBIT and volume- and tariff-related timing differences



Completeness and accuracy of the net turnover and procurement costs



Correct recording of investments in property, plant and equipment

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.



**Accuracy of the calculation of the regulated EBIT and volume- and tariff-related timing differences**

**Key Audit Matter**

For the 2016 financial year Swissgrid reports an EBIT (earnings before interest and taxes) of CHF 152.9 million. The change in volume- and tariff-related timing differences amounts to CHF -15.3 million.

The EBIT presented in Swissgrid's financial statements is legally defined as the multiplication of the invested operating assets (regulatory asset base, "RAB") by the applicable regulatory interest rates plus taxes. The RAB consists of the transmission grid assets (incl. construction in progress), the intangible assets, the net current assets determined on a monthly basis and the accumulated volume- and tariff-related timing differences.

Cost and volume variances between the actual costs and income for a year and the costs and income pre-determined in advance at tariff level for the same year lead to so-called volume- and tariff-related timing differences. These are deferred separately as surpluses or deficits in the balance sheet and must be amortised over the coming years. The yearly change is recorded separately in the income statement under "Change in volume- and tariff-related timing differences".

There is a risk that the EBIT and the volume- and tariff-related timing differences are not calculated according to the applicable legal and regulatory provisions and that, consequently, the EBIT and the volume- and tariff-related timing differences are not presented correctly in the financial statements.

For further information on the calculation of the regulated EBIT and volume- and tariff-related timing differences refer to the notes of the financial statements under note "1. Accounting principles" (paragraph Activities according to StromVG).

**Our response**

We have performed mainly the following audit procedures:

- Identification of the key controls and verification of their effectiveness using sampling;
- Reconciliation of the method used for calculating the regulated EBIT and volume- and tariff-related timing differences with the legal, administrative and regulatory requirements;
- Recalculation of the interest on the various components of the RAB using the interest rates according to the legal base (StromVG/StromVV) as well as to the decisions and directives of the Swiss Federal Electricity Commission (EiCom) and comparison with the recorded values;
- Evaluation of the completeness and transparency of the disclosures presented in the financial statements.



## Completeness and accuracy of the net turnover and procurement costs

### Key Audit Matter

For the 2016 financial year Swissgrid reports a net turnover of CHF 1,250.8 million and the procurement costs amount to CHF 767.3 million.

The calculation of the net turnover (performance) and procurement costs is based mainly on the energy data directly metered on the transmission system or reported from downstream grid levels. For the measurement of performance, regulated tariffs must mainly be taken into account; for the procurement costs the applicable market prices.

Swissgrid's regulated activities are characterized by a high volume of IT-based transactions.

For certain turnover and procurement costs positions, no volume base exists at the closing date yet, which requires to make estimates and assumptions.

Due to the transaction volume, the various IT-interfaces and the estimates / assumptions, there is a risk that the performance and costs are not calculated completely and correctly.

### Our response

We have analyzed the process relative to the calculation of the net turnover and procurement costs and we have determined whether the energy data have been recorded completely and correctly. In this respect, we have among others identified the key controls and we have then verified their effectiveness using sampling. We have considered the high degree of integration of the provision and recording of services by the various IT-systems by testing the effectiveness of the general IT-controls and application controls of the relevant IT-systems for accounting purposes with the assistance of our IT-specialists.

In order to assess the completeness and accuracy, we have also critically examined the main assumptions and evaluated the accuracy of the forecasts regarding the presented accruals, in particular by comparing retrospectively the accrued amounts and the actual amounts.

Furthermore, we have assessed the appropriateness of the disclosures in the financial statements concerning the corresponding positions of the balance sheet and income statement.

For further information on the net turnover and the procurement costs refer to the notes of the financial statements under note "2. Estimation uncertainty" and under note "3. Net turnover and procurement costs".



### Correct recording of investments in property, plant and equipment

#### Key Audit Matter

Property, plant and equipment used for operating activities and the related construction in progress cover approx. 60 % (CHF 2,090 million) of total assets.

As part of the necessary modernization of the transmission grid in order to ensure the secure supply of electricity, investments aiming to optimize, reinforce and develop the transmission grid are of strategic importance for Swissgrid.

In this regard, there is among others a risk that the maintenance and repair costs that do not create additional value are capitalized in the balance sheet assets instead of being expensed in the income statement. Regarding construction in progress, there is also a risk that depreciations are not made from the moment when the item of property, plant and equipment is used.

#### Our response

We have performed mainly the following audit procedures:

- Identification of the key controls concerning property, plant and equipment and verification of the controls' effectiveness (including general IT-controls) using sampling;
- Evaluation whether the new investments recorded under construction in progress qualify for capitalization, using sampling, including reconciliation of the amounts capitalized with the invoices received and for the self-constructed assets with the corresponding detailed documents;
- Critical assessment of the moment of the transfer of completed projects / partial projects from construction in progress to the corresponding investment category;
- Analysis of the attribution of installations to the correct investment category and reconciliation of the attributed useful life with Swissgrid's finance manual.

For further information on property, plant and equipment refer to the notes of the financial statements under the note "1. Accounting principles" (paragraph property, plant and equipment) and under the note "14. Property, plant and equipment".



### **Responsibility of the Board of Directors for the Financial Statements**

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Swiss law and Swiss Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.





From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

### **Report on Other Legal and Regulatory Requirements**

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

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

KPMG AG

Rolf Hauenstein  
Licensed Audit Expert  
Auditor in Charge

Patrizia Chanton  
Licensed Audit Expert

Basel, 5 April 2017

KPMG AG, Viaduktstrasse 42, PO Box 3456, 4002 Basel

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**53**  
building sites

**469**  
flight hours

The sites at which the electricity pylons needed for the grid connection are constructed are sometimes in very inaccessible locations. The construction workers arrive at their place of work each day by helicopter or, in some cases, by hour-long ascents.

The construction materials also have to be flown to the building sites. By the end of 2016, Air Glaciers had spent 469 flight hours transporting hundreds of tons of cement, metal components, tools and machinery to the 53 building sites in the Trient Valley. The employees of up to three different companies were working simultaneously at several building sites, requiring up to 50 flights a day. They had to be supplied continuously with materials, some of which had to be taken away again after use.



Christian Rosa  
Helicopter pilot, Air-Glaciers





# Corporate governance



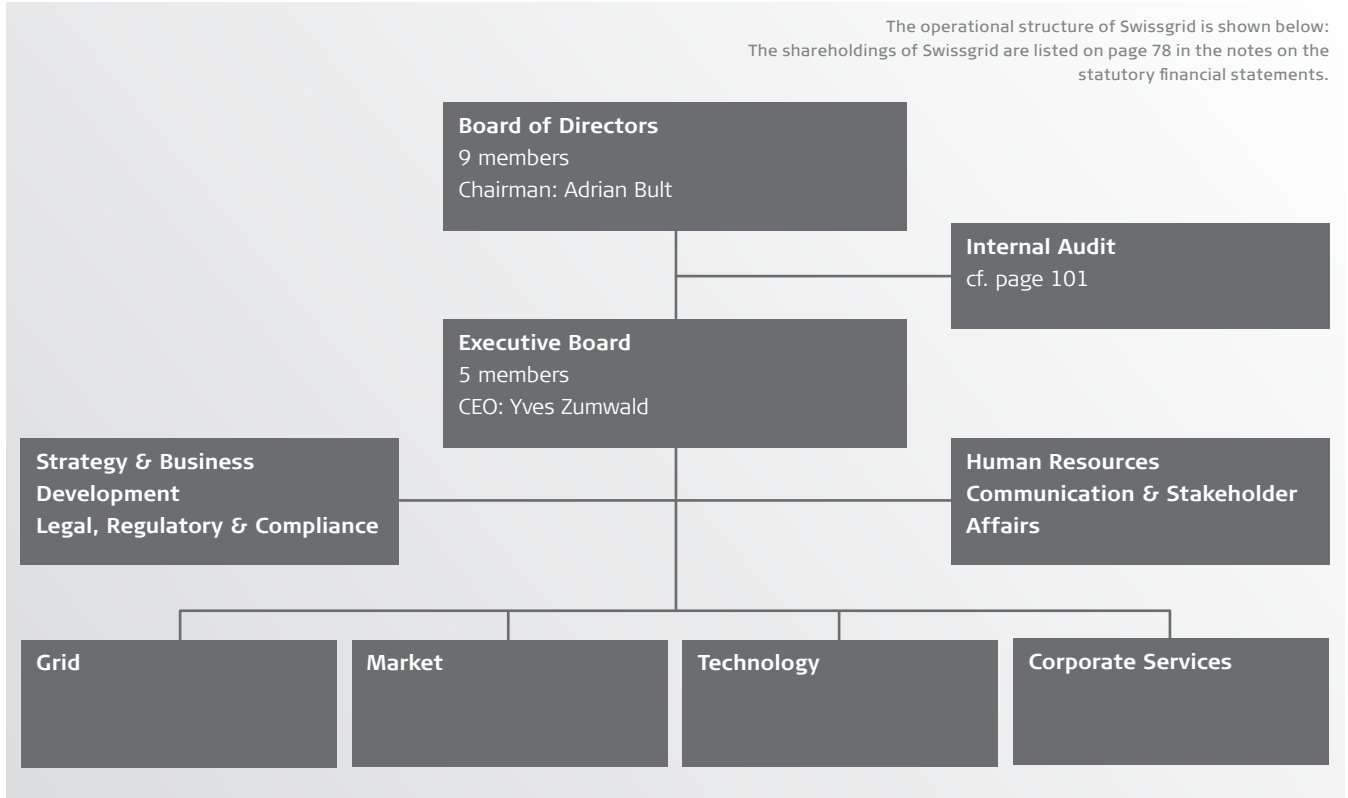


The Board of Directors and Executive Board of Swissgrid Ltd (hereinafter: Swissgrid) place great importance on good corporate governance. The following statements are based on the Swiss Code of Best Practice for Corporate Governance. All information relates to the reporting date 31 December 2016, unless specified otherwise.



# Corporate structure and shareholders

## CORPORATE STRUCTURE



## SHAREHOLDERS

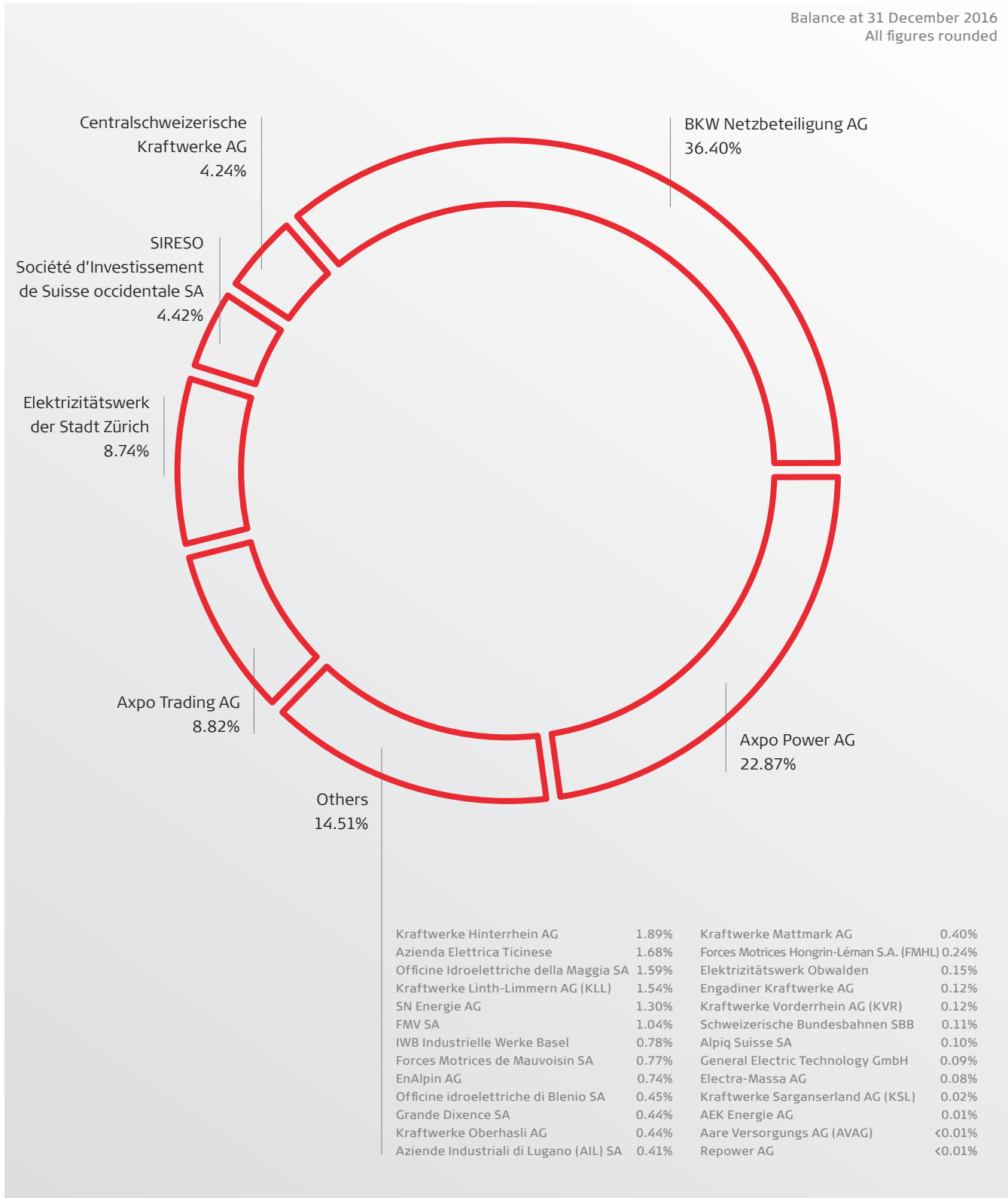
The following companies are Swissgrid shareholders: as of 31 December 2016, Swissgrid is wholly owned by Aare Versorgungs AG (AVAG), AEK Energie AG, Alpiq Suisse SA, Axpo Power AG, Axpo Trading AG, Azienda Elettrica Ticinese, Aziende Industriali di Lugano (AIL) SA, BKW Netzbeteiligung AG, Centralschweizerische Kraftwerke AG, Elektrizitätswerk der Stadt Zürich, Elektrizitätswerk Obwalden, Electra-Massa AG, EnAlpin AG, Engadiner Kraftwerke AG, FMV SA, Forces Motrices Hongrin-Léman S.A. (FMHL), Forces Motrices de Mauvoisin SA, General Electric Technology GmbH, Grande Dixence SA, IWB Industrielle Werke Basel, Kraftwerke Hinterrhein AG, Kraftwerke Linth-Limmern AG (KLL), Kraftwerke Mattmark AG, Kraftwerke Oberhasli AG, Kraftwerke Sarganserland AG (KSL), Kraftwerke Vorderrhein AG (KVR), Officine Idroelettriche della Maggia SA, Officine idroelettriche di Blenio SA, Repower AG, Schweizerische Bundesbahnen SBB, SIRESO Société d'Investissement de Suisse occidentale SA and SN Energie AG. Swissgrid is directly or indirectly majority-owned by the cantons and the municipalities. The current shareholder structure can be viewed online ([www.swissgrid.ch](http://www.swissgrid.ch)).

## CROSSHOLDINGS

There are no cross shareholdings.

OWNERSHIP STRUCTURE OF SWISSGRID

Balance at 31 December 2016  
All figures rounded





## Capital structure

### CAPITAL AND RESTRICTION ON TRANSFERABILITY

The ordinary share capital as at 31 December 2016 consists of 317,917,131 registered shares with a nominal value of CHF 1 per share (divided into 158,958,566 A registered shares and 158,958,565 B registered shares). Upon entry in the commercial register on 28 November 2016, Swissgrid also took over additional transmission grid assets and raised its share capital accordingly by CHF 1,590,068 (by 795,034 A registered shares and 795,034 B registered shares). The conditional share capital as of 31 December 2016 consists of a maximum of 128,409,932 fully paid-up registered shares (half A registered shares and half B registered shares), each with a nominal value CHF 1.00. The conditional share capital relates to received convertible bonds that Swissgrid used to finance the transfer of the transmission grid. Creditors can exercise conversion rights over a maximum of 20 years. Shareholders have no pre-emptive rights. Shareholder advance subscription rights are also excluded, as the convertible bonds are financing the takeover of integrated grid companies or individual system elements, or the simple and rapid improvement of Swissgrid's capital resources.

No authorised capital exists. According to Article 18 (5) of the Electricity Supply Act, the company's shares may not be listed on a stock exchange. The Board of Directors maintains a share register in which the names and addresses of the owners and beneficiaries are entered. Only shareholders or beneficiaries entered in the share register are recognised by the company and are authorised to exercise their shareholder rights. 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. According to Article 18 (3) of the Electricity Supply Act, the majority of the share capital and the associated voting rights must be directly or indirectly held by the cantons and municipalities. In the event of share transfers (sale, gift, exercise of pre-emption rights and purchase rights, etc.), these majorities must be retained. If an intended transaction breaches one of these majority ownership requirements, the Board of Directors must not grant its approval.

There are no participation or profit-sharing certificates and no options were issued.

### CAPITAL CHANGES

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

# Board of Directors

## MEMBERS OF THE BOARD OF DIRECTORS, ADDITIONAL ACTIVITIES AND AFFILIATIONS

### ADRIAN BULT

Chairman, independent member  
Born in 1959, Swiss



Adrian Bult, lic. oec., has been a member of the Board of Directors since 2006 and its Chairman since 2012 and he is also the Chairman of the Strategy Committee. In addition, he is a member of the Staff and Compensation Committee. From 2007 to 2012, he was a member of the Executive Board (COO) at Avaloq Evolution AG. Until 2007, he was the Head of IT Telecom PTT and was later represented in the Group management of Swisscom, initially as CIO, then as CEO Swisscom Fixnet and finally as CEO Swisscom Mobile. Before this, he was a member of the Executive Board of IBM Switzerland.

**Affiliations** Board of Directors of Swissquote Holding AG, Enkom AG, AdNovum AG, Garaio AG, Alfred Müller AG, SWICA, Regent AG and Chairman of the CRF Foundation.

### DORIS RUSSI SCHURTER

Vice Chairwoman, independent member  
Born in 1956, Swiss



Doris Russi Schurter, lic. iur., lawyer, has been a member of the Board of Directors since 2007 and its Vice-Chairwoman since 2012 and she is the Chairwoman of the Finance and Audit Committee. In 2005, she joined the legal firm Burger & Müller in Lucerne. Prior to this, she was a partner of KPMG Switzerland and Head of KPMG Lucerne.

**Affiliations** Vice-Chairwoman of the Board of Directors of Helvetia Holding AG, member of the Board of Directors of Luzerner Kantonalbank AG and Swiss International Air Lines AG, Chairwoman of the Board of Directors of LZ Medien Holding AG and of the Association of Swiss Companies in Germany (VSUD).

### MARCEL FREI

Board of Directors, industry representative,  
Born in 1959, Swiss



Marcel Frei, Swiss-certified expert in accounting and financial controlling, has been a member of the Board of Directors and the Finance and Audit Committee since 2012. He has been the Director of ewz (the electricity supplier to the City of Zurich) since 2012. Before this, he was the CFO, and from 2009 onwards, also the Deputy Director of ewz.

**Affiliations** Board of Directors for companies affiliated with ewz and for various companies in the energy sector.

### ISABELLE MORET

Board of Directors, independent member  
Born in 1970, Swiss



Isabelle Moret, lic.jur., LL.M, lawyer, has been a member of the Board of Directors since 2012 and Chairwoman of the Staff and Compensation Committee since 2014. She runs her own law firm. She has been a member of the National Council since 2006. Prior to this, she was a member of the Grand Council of the Canton of Vaux and from 2008 to April 2016 Vice Chairwoman of the liberal party FDP.

**Affiliations** Foundation Board of the ECA-RP pension fund, Vice Chairwoman of the Board of Directors of Retraites Populaires, member of the Executive Committee of economieuisse (association of Swiss companies), Chairwoman of the Federation of Swiss Food Industries and of H+, the association of Swiss hospitals.

### CLAUDE NICATI

Board of Directors, cantonal representative  
Born in 1957, Swiss



Claude Nicati, lic. iur., lawyer, has been a member of the Board of Directors and Strategy Committee since 2014. Until 3 May 2016, he was a member of the Staff and Compensation Committee. He works as an independent lawyer. From 2009 to 2013, he served as Councillor of the Canton of Neuenburg and Head of the Regional Planning department. From 1997 to 2009, he was examining magistrate for the Canton of Neuenburg and finally Deputy Federal Public Prosecutor. Before this, he held various senior positions in municipal and cantonal police departments.

**Affiliations** Board member in various not-for-profit organisations.

**ANDREAS RICKENBACHER**

Board of Directors, cantonal representative  
Born in 1968, Swiss



Andreas Rickenbacher, MSc in business administration and political sciences, has been a member of the Board of Directors and Staff and Compensation Committee since 2016. He is the owner of Andreas Rickenbacher Management AG. From 2006 to 2016, he served as Councillor of the Canton of Bern and Director of the Department of Economic Affairs. Prior to this, he worked as an independent business consultant; among other things, he founded rickenbacher projekte gmbh. From 1992 to 1998, he worked as project assistant and later as project director in the GfS research institute. From 1994 to 2006, he was a member of the Grand Council of the Canton of Bern.

**Affiliations** Chairman of the Board of Directors of BE! Tourismus AG, Board of Directors of Aebi Schmidt Holding Ag, Bernexpo Holding AG and HRS Real Estate AG, Vice Chairman of the foundation Switzerland Innovation and member of the organising committee of FIS Worldcup Wengen (international Lauberhorn ski races).

**RONALD TRÄCHSEL**

Board of Directors, industry representative,  
Born in 1959, Swiss



Ronald Trächsel, lic. rer. pol., has been a member of the Board of Directors and Audit Committee since 2015. He has been working as CFO of BKW AG since 2014. He was CFO of Sika Group from 2008 to 2014. Before this, he served as CEO and CFO of vitra for eight years. From 1995 to 1999, he was CFO of Ringier International.

**Affiliations** Chairman of the Board of Directors of Wyss Samen und Pflanzen AG, Board of Directors of Contour Global, Ltd. and Création Baumann AG. In addition, Ronald Trächsel is Chairman of the Board of Directors of AEK Onyx AG and Board of Directors of Kraftwerke Oberhasli AG.

**ANDREW WALO**

Board of Directors, industry representative,  
Born in 1963, Swiss and English



Andrew Walo, Dr. oec. publ., has been a member of the Board of Directors and Strategy Committee since 2014. He has been CEO of Axpo Holding AG since 2014. From 2004 to 2014, he was a member of the Group management of Axpo Holding AG and Managing Director of Centralschweizerische Kraftwerke AG. Before this, he was Managing Director of SN Energie AG and held senior positions at Alstom and ABB.

**Affiliations** Chairman of the Board of Directors at Centralschweizerische Kraftwerke AG, Chairman of the Board at Swisselectric, member of the Executive Committee at economiesuisse (association of Swiss companies) and member of the Waste Disposal Advisory Council.

**MICHAEL WIDER**

Board of Directors, industry representative,  
Born in 1961, Swiss



Michael Wider, lic. iur., MBA, has been a member of the Board of Directors and Strategy Committee since 2009. He has been Head of Generation and Deputy CEO of Alpiq Holding AG since 2009. From 2003 to 2009, he was a member of the Executive Board of Alpiq Group and among other things worked as Head of Energy Switzerland of Alpiq and Head of the Energy division at EOS. Before this, he held various senior positions at Entreprises Electriques Fribourgeoises (EEF).

**Affiliations** Chairman or member of the Board of Directors of various energy companies and member of the Board of swisselectric.

**Departures in the reporting period** Fadri Ramming, on 3 May 2016

## ELECTION AND TERM OF OFFICE

The Board of Directors is comprised of at least three elected members. The majority of members and the chairman must meet independence requirements in accordance with Article 18 (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 the 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 company's Board of Directors (Art. 18 (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, Vice Chairman and the Secretary, who does not have to be a member of the Board of Directors.

## INTERNAL ORGANISATION

The Board of Directors is responsible for the overall management of the company and for supervising the management of the company. 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 (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 arranges the corresponding contractual relationships. The powers of the Board of Directors and the Executive Board are defined in the organisational regulations. The members of the Board of Directors do not exercise any executive roles within Swissgrid. The Board of Directors met nine times in the last financial year.

## BOARD COMMITTEES

In order to incorporate the specialist knowledge and broad range of experience of the individual members in the decision-making process, or to report as part of its supervisory duty, the Board of Directors formed three committees 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 detail 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 ongoing communication with the external auditors concerning the financial position and course of business. It makes the necessary preparations relating to the appointment or discharge of auditors. The Finance and Audit Committee met five times during the last financial year.

**Staff and Compensation Committee** The Staff and Compensation Committee draws up principles for all compensation components of the members of the Board of Directors, the CEO and the members of the Executive Board, and submits a proposal to the Board of Directors accordingly. The committee defines the compensation of 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 seven times in the last financial year.

**Ad hoc committees** The Board of Directors may appoint ad hoc committees for specific tasks. It did not set up any such committee in the last financial year.

## 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 meetings, the Executive Board presents and comments on business performance and submits all important issues for discussion or resolution.
- A 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 meeting and also deals with recurring issues, such as the ancillary services reports, grid expansion projects and key performance indicators (KPI).
- Additional periodically recurring information instruments for the Board of Directors are the risk report and the reports on developments in the energy sector in Switzerland and Europe.
- The external auditor issues an annual written report for the Board of Directors (see also the comments on page 103).

**Internal control system** The internal control system has an important role as part of corporate management and monitoring, and covers all procedures, methods and measures mandated by the Board of Directors and the Executive Board that serve to ensure that Swissgrid operates in the correct way. The internal operational controls are integrated into 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 function, but are integrated into the processes. The internal control system at Swissgrid is implemented at all levels of the organisation and demands a high level of personal responsibility from employees.

**Internal Audit** The Internal Audit division reports to the Board of Directors, while certain operational management tasks are transferred to the Finance and Audit Committee. The Internal Audit division provides independent and objective audit and consulting services aimed at creating added value and improving business processes. It assists the organisation in fulfilling its tasks by systematically and objectively evaluating and improving the effectiveness of risk management and the internal control system (i.e. the management and monitoring processes). The Board of Directors approves the Internal Audit division's audit planning annually upon application by the Finance and Audit Committee. The Internal Audit division pursues a risk-based audit approach. The individual audit reports are submitted to the Chairman and the Finance and Audit Committee and presented for discussion. The implementation of measures is monitored. The Internal Audit division performed six audits during the year under review. The Head of Internal Audit may use co-sourcing and appoint an audit company independent from the external audit to perform the audits.

**Risk management** Risk management is an integral part of effective and prudent corporate management for Swissgrid. Swissgrid's risk management covers the entire organisation, takes account of established standards (ISO 31000) and satisfies the internal requirements of corporate governance as well as the requirements under Swiss law. Additional information on the implementation of the risk assessment can be found in the Management Report on pages 28 to 30.

# Executive Board

## MEMBERS OF THE EXECUTIVE BOARD, ADDITIONAL ACTIVITIES AND AFFILIATIONS

### YVES ZUMWALD

CEO

Born in 1967, Swiss



Yves Zumwald, Dipl.-Ing., dipl. EPG-EPF in energy, has been CEO of Swissgrid since March 2016. From 2014 to March 2016, he was a member of the Executive Board and Head of Grid. From 2009 to 2014, he was a Board member and Director of the Sales division at the Romande Energie Group. Before this, he worked at EOS Holding (Energie Ouest Suisse), where he was responsible for grid usage and grid access, before serving as a member of the Executive Board with responsibility for the Infrastructure department at EOS Réseau. At the beginning of his professional career, he worked at EOS and Orange Communications.

**Affiliations** Head of the Electricity department in the Energy division of the Federal Office for National Economic Supply, Board member of procedural companies (see also financial report on page 52).

### LUCA BARONI

CFO, Head of Corporate Services

Born in 1971, Swiss and Italian



Luca Baroni, eidg. dipl. Betriebsökonom (Bachelor of Business Administration) FH / HWV and Executive MBA HSG, was CFO and a member of the Executive Board from 2005 and resigned with effect from 31 December 2016. From 2000 to 2005, he worked at Elektrizitätsgesellschaft Laufenburg AG (EGL) as Head of Controlling and Energy Invoicing and finally as CFO/Head of Finance and Controlling of Energiedienst Holding AG. Before this, he worked at Genossenschaft Migros Aargau/Solothurn and for the Group Accounting division of Watt AG.

**Affiliations** Foundation Board of CRF Foundation and Board of Directors of procedural companies (up to 31 December 2016).

### MAURICE DIERICK

Head of Grid Operations

Born in 1964, Dutch



Maurice Dierick, Dipl.-Ing. Maschinenbau (graduate mechanical engineer), has been a member of the Executive Board since June 2016. Prior to this, he was the Head of the Grid Infrastructure department at Swissgrid. From 2012 to 2015, he worked at Western Power in Australia, among others, on behalf of Ernst & Young. From 2004 to 2012, he worked as an independent consultant, sometimes in cooperation with consulting companies such as Pöyry, supporting various transformation projects in the area of asset management at German, French and Swiss power supply companies. Before this, he worked as an engineer at major industrial companies in France and Germany until he switched to consulting in 1998, finally for Cap Gemini Ernst & Young in the Netherlands.

**Affiliations** Deputy Chairman of the Specialist Commission for High Voltage Questions.

### RAINER MÜHLBERGER

Head of Technology

Born in 1958, Swiss and German



Rainer Mühlberger, Dipl.-Ing. Maschinenbau (graduate mechanical engineer), has been a member of the Executive Board since June 2013. Initially, he was in charge of the Strategy & Development department before being appointed as Head of the new Technology department in February 2016. He joined Swissgrid in 2011 as Head of Strategy. From 2008 to 2011, he was CEO of Swisscom Directories Ltd. From 2002 to 2007, he served as a member of the Executive Board at Swisscom Fixnet AG – first as Head of Business Development and finally as Head of IT. Before this, he was Project Manager for Corporate Strategy at Swisscom AG.

**Affiliations** Chairman of the Board of Directors of CESOC AG and member of the Board of Directors of JAO S.A.

**DR JÖRG SPICKER**

Head of Market Operations  
Born in 1957, German



Jörg Spicker, graduate physicist and doctor of astrophysics, has been a member of the Executive Board and Head of Market Operations since 2013. Prior to this, he worked as a Senior External Advisor at McKinsey. From 2002 to 2012, he was a Board member of Atel Energie AG and from 2009 of Alpiq Energie Deutschland AG. From 1999 to 2002, he was Managing Director of Aquila Energy GmbH. Prior to this, he held various technical and commercial positions at Ruhrgas AG, finally as Head of North Sea Gas Purchasing.

**Affiliations** Member of the Board of Directors of the Holding of Gestionnaires de Réseau de Transport d'Électricité SAS and EPEX SPOT SE as well as Board member of Renewables Grid Initiative (RGI).

**Resignation in the reporting period**

Luca Baroni, CFO, on 31 December 2016

**Appointments in the reporting period**

Yves Zumwald, CEO, on 23 March 2016

Maurice Dierick, Head of Grid Operations, on 7 June 2016

## Remuneration

The members of the Board of Directors receive a fixed remuneration (fees and expenses) based 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 within the framework defined by the Board of Directors. Payments to the Executive Board and the Board of Directors are disclosed on pages 47 and 48 of the Notes to the Swiss GAAP FER financial statements.

## Rights of participation

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

## External audit

**MANDATE AND FEES**

KPMG AG, Basel, acts as the statutory auditor for Swissgrid Ltd. The audit mandate was first awarded to KPMG for the 2005-2006 financial year (long year). The auditor in charge, Rolf Hauenstein, has been in this role since the 2015 financial year. The auditor is appointed at the Annual General Meeting for a one-year term. For its function as auditor, KPMG received remuneration of CHF 187,000 for the last financial year. The total remuneration for additional services amounted to CHF 71,000.

**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 garnered from holding similar positions in other companies to evaluate the audit. They also base their evaluation on the documents provided by the external auditor, such as the comprehensive report and the verbal and written statements on individual aspects in connection with accounting, the internal control system and the audit.



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foundations

An interdisciplinary team of biologists, surveyors and other scientific employees checks each of the locations of the new electricity pylons. For example, before the foundations are laid, geologists investigate the nature and mechanical characteristics of the substrate. At the same time, they evaluate potential geological risks, such as landslides or falling rocks. This ensures the required stability for the pylons, which is essential for the new lines.

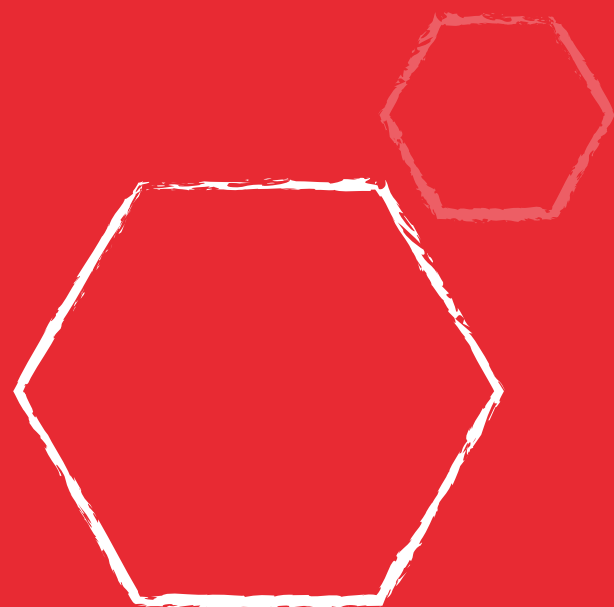
During the construction work for the grid connection of the Nant de Drance power plant, geological surveys have been conducted for each of the four foundations per electricity pylon. In total, the specialists have checked the substrate of 136 foundations. These investigations have also contributed to an even more precise study of the crystalline rock mass of the Aiguilles Rouges and Mont de l'Arpille in the Trient Valley, thus advancing knowledge of the geological history of the Valais Alps.





Yuri Pitteloud  
Geologist, Tissières SA

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electricity pylons



#### IMPRINT

The Annual Report is published in English, German and French. The version in the German language is legally binding.  
Further information on Swissgrid is available at [www.swissgrid.ch](http://www.swissgrid.ch)

Publisher: Swissgrid Ltd | Werkstrasse 12 | CH-5080 Laufenburg | [www.swissgrid.ch](http://www.swissgrid.ch)  
Concept, Layout, Design and Editing: Schwindl Schär GmbH, Basel  
Printed by Neidhart + Schön AG, Zurich

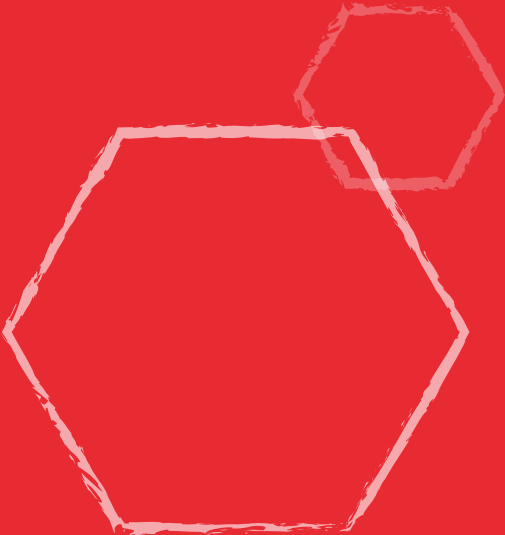
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Print | ID 53232-1612-1006





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