



Report on the activities of ElCom 2013



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Electricity Commission ElCom

Published by

Swiss Federal Electricity Commission ElCom
Effingerstrasse 39, CH-3003 Bern
Phone +41 58 462 58 33 · Fax +41 58 462 02 22
info@elcom.admin.ch · www.elcom.admin.ch

Illustrations Swiss Eole (page 1)
 Axpo (page 8, 34)
 Swissgrid (page 16)
 Vattenfall (page 22)
 ElCom (page 40)

Edition D: 400, F: 200, I: 50, E: 100
Available in German, French, Italian and English · 6/2014

Contents

1	Foreword by the President	4
2	Foreword by the Director of the Technical Secretariat	6
3	Networks.....	8
3.1	Facts and figures relating to the Swiss electricity network.....	8
3.2	Transfer of the transmission network to Swissgrid	12
3.3	Network expansion and planning	12
3.4	Increase in network capacity.....	14
4	Supply security.....	16
4.1	Quality of supply.....	16
4.2	Supply security report.....	18
4.3	Monitoring of the market	19
4.4	System services	19
5	The Swiss electricity market	22
5.1	Market situation.....	22
5.2	Transmission network tariffs	24
5.3	Distribution network tariffs.....	24
5.4	Judicial practice.....	29
5.5	“Sunshine” regulation	30
5.6	Network access.....	32
5.7	Feed-in remuneration at cost	33
6	International activities	34
6.1	Congestion management.....	34
6.2	Border power plants.....	35
6.3	Market transparency.....	36
6.4	Auction proceeds.....	36
6.5	International bodies	38
6.6	International legal developments.....	39
7	About ElCom	40
7.1	Duties	40
7.2	Organisation and personnel	41
7.2.1	The Electricity Commission	42
7.2.2	Technical Secretariat.....	43
7.3	Finance.....	46
7.4	Events	46
7.4.1	ElCom 2013 Forum.....	46
7.4.2	Information events for network operators.....	46
8	Appendix.....	47
8.1	Facts and figures for 2013	47
8.2	Appeal statistics.....	47
8.3	Meetings	47
8.4	Publications	48
8.5	Glossary	54
8.6	List of abbreviations, tables and illustrations	56

1 Foreword by the President



Carlo Schmid-Sutter
President of ElCom

In accordance with the Electricity Supply Act, which entered into force on 23 March 2007, ElCom is required to monitor compliance with the provisions of this Act and is responsible for their enforcement. Its supervisory and enforcement duties can be divided into four thematic areas: (1) Examination of tariffs, auditing of network use remuneration and energy prices (basic supply); (2) Securing network access for “free end consumers”; (3) Monitoring supply security; (4) Coordinating its activities with foreign regulatory authorities. It also has to perform tasks as called for by the Energy Act, in particular in connection with feed-in remuneration at cost.

In its performance of these various duties, ElCom has in particular focused on the regulatory principles for examining tariffs, carried out an in-depth analysis of Switzerland’s supply security and supported access to the markets in our neighbouring countries, notably by promoting cooperation between the Swiss transmission network and an internationally active electricity exchange.

From a regulatory point of view, the following comments regarding the examination of tariffs strike me as noteworthy: Since the transmission network tariffs have been repeatedly examined by ElCom in the past few years, and the principles for this task have been clarified in an extremely complex process that

has called for the deployment of significant resources and has also had to be modified following various court rulings, the Commission can now limit itself to summary examinations of network level 1 tariffs as long as no major changes take place regarding the installations and activities of the national network operator.

With respect to distribution network tariffs, as noted in section 5.5 of this report, ElCom has carried out preparatory work on a “sunshine” solution and hopes to be able to initiate a two-year trial period in the second half of 2014. In ElCom’s view, this solution should give rise to a reduction in the number of proceedings.

However, the cost-plus regulation, as foreseen in Article 15 of the Electricity Supply Act, will remain the basis. From the point of view of supply security, the guarantee of cost-covering pricing that is associated with the cost-plus regulation minimises the risk of non-amortisable investments and thus secures the willingness on the part of electricity supply companies to make investments. This is demonstrated by the investment behaviour of the network operators: In the 6 years since the Electricity Supply Act entered into force, investments in Switzerland’s electricity network have remained constant at around 1.4 billion Swiss francs per annum.

However, ElCom is aware that in the long term, cost-plus regulations can also act as a barrier to investment unless the regulator applies calculable and reliable evaluation criteria that have been publicised in advance. The "Rapperswil criteria" dated 25 November 2010 and the option of preliminary notifications concerning "further-reaching increases in network capacity" in accordance with ElCom Directive 4/2012 dated 31 October 2012 can be viewed as examples of this.

Next year ElCom wants to continue pursuing regulations that refrain from intervening in the structures of the industry, support legal certainty and investment security, and facilitate informal and expedient proceedings, while seeking to ensure competitive pricing.

To conclude I wish to thank Werner Geiger and Hans Jörg Schötzau on behalf of ElCom for their valuable services. They both submitted their resignation from the Commission as of the end of the year, for age reasons. With their enormous practical experience in the industry and their comprehensive expertise, they supported the development of ElCom with a high degree of personal commitment and greatly influenced the activities of the Commission in this highly complex interdisciplinary environment. I would also like to wish the new members who have been appointed by the Federal

Council, namely Christian Brunner and Antonio Taormina, every success in their future activities.

A handwritten signature in black ink, appearing to read 'Taormina', with a stylized, cursive script.

2 Foreword by the Director of the Technical Secretariat



Renato Tami
*Director of ElCom
Technical Secretariat*

The Technical Secretariat provides the Commission with professional and technical support, prepares its decisions and implements them. It conducts legal proceedings and carries out the necessary clarifications. In the period from 2008 to 2013, ElCom pronounced a total of 249 rulings. The fact that 96 of these were pronounced in the year under review indicates how intensive ElCom's activities were in 2013.

Activities associated with the remuneration of costs for necessary increases in network capacity rose particularly sharply in the year under review, with 95 applications as compared to 37 in 2012 and 11 in 2011. ElCom was able to rule on 61 of the 95 applications. In the past four years it has ruled on a total of 91 applications for remuneration of costs for increases in network capacity amounting to around 18.5 million Swiss francs and involving a total production output of 123.4 MW.

In August 2013, ElCom ruled that stub lines (with and without supply character) that are operated at the 220/380 kV level belong to the transmission network and have to be transferred to the ownership of Swissgrid. This ruling has meanwhile become legally binding and means that Switzerland's transmission network is now uniformly defined and separated from the distribution network and encompasses

all lines and installations at the 220/380 kV level.

It is pleasing to be able to report that the framework conditions for electricity procurement have evolved in the direction of greater competition. In the year under review, ElCom recorded the data of the approximately 80 largest network operators in order to calculate the changeover rate. While a certain amount of movement towards a competitive market had already been witnessed in the past few years, in the most recent survey another significant step in this direction was seen. In 2014, 27 percent of the eligible end consumers will participate in the free market, which is equivalent to a share of 47 percent of the available energy volume on that market. In both cases, these figures have almost doubled in comparison with the previous year.

As a consequence of the constantly growing competition in the area of electricity procurement, the number of disputes to be dealt with by ElCom relating to network access also increased. In one case the question of who was entitled to network access was contested and ElCom pointed out that it is not the measurement point that accesses the market, but rather the consumption location, i.e. the premises at which the end user operates. In order to gain access to the network, a consumption estimate is sufficient. In another case, ElCom granted an end consumer

access to the network which had been refused by the operator on the basis of the argument that a twelve-month period of notice had been specified in the agreement concluded in 1983. ElCom ruled that the provision stipulated in the Electricity Supply Ordinance takes precedence over the clauses of an agreement under private law, and thus that to terminate the agreement as of the end of the year by giving notice by the end of October was sufficient.

It is also pleasing to be able to report that the most recent surveys conducted by ElCom with respect to supply quality yielded positive findings, including a high degree of network availability. In 2012, the average duration of unscheduled interruptions per end consumer was 22 minutes. This represents a slight increase of 6 minutes versus the previous year, which was primarily attributable to extraordinary natural occurrences, including an unusually cold period during January and February. In a European comparison, Switzerland is still able to report a very high degree of network availability despite the slight increase in unscheduled interruptions, and it continues to figure among the top five countries in the European rankings.

In the year under review, ElCom formulated a set of guidelines with the aim of defining its mission and outlining its basic principles for action. These guidelines have been included in chapter 7 of this report.

A handwritten signature in black ink, appearing to read 'Tami', with a long horizontal line extending from the top left of the first letter.

3 Networks



High voltage transmission network in Tavanasa (canton of Grisons)

3.1 Facts and figures relating to the Swiss electricity network

As in the past, ElCom again collected cost-accounting data from all network operators during the year under review. Table 1 presents an overview of the most important installations in the Swiss electricity network. It contains complete data from around 680 of the ap-

proximately 700 network operators and encompasses all the major operators. The figures are self-declarations submitted by the operators themselves, and not all of them have been verified by ElCom.

Type of installation	2010	2011	2012	Unit
Pipe system, high voltage (NL 3), medium voltage (NL5) and low voltage (NL 7)	101,409	102,832	104,894	km
Cable (NL3)	1,893	1,917	1,980	km
Cable, medium voltage (NL 5)	30,607	31,370	32,174	km
Cable, low voltage (NL 7)	72,852	72,491	73,382	km
Cable, connection to household (NL 7)	45,926	46,454	47,957	km
Supply line (NL 1)	6,750	6,750	6,750	Line km
Overhead line (NL 3)	7,057	6,935	6,918	Line km
Overhead line, medium voltage(NL 5)	12,232	11,888	11,570	Line km
Overhead line, low voltage (NL 7)	11,558	11,117	10,835	Line km
Substation, NL 2, NL 3, NL 4 and NL 5	1,114	1,192	1,144	Quantity

Type of installation	2010	2011	2012	Unit
Transformer, NL 2	150	158	154	Quantity
Switching field, NL 2	139	164	185	Quantity
Transformer, NL 3	92	96	97	Quantity
Switching field, NL 3	1,917	2,268	2,577	Quantity
Transformer, NL 4	1,117	1,140	1,147	Quantity
Switching field, NL 4	1,384	1,781	1,906	Quantity
Transformer, NL 5	1,067	785	585	Quantity
Switching field, NL 5	27,467	27,811	27,366	Quantity
Transformer station, NL 6	48,985	49,190	51,100	Quantity
Mast transformer station, NL 6	6,287	6,150	5,716	Quantity
Cable distribution box, low voltage (NL 7)	155,764	158,937	156,839	Quantity
No. of network operators	687	683	679	

Table 1: Installations in the Swiss electricity network

The installations in Switzerland's electricity network have remained more or less unchanged in the past few years, though it is interesting to note the reduction in the number of overhead lines at all levels in the distribution network.

The total value of the installations in the distribution network is close to 18 billion Swiss francs, while network utilisation revenue amounts to 3.3 billion Swiss francs per annum. Figures 1 and 2 show the distribution of these two totals by size of company. In both these graphs, the hundred largest network operators have been formed into groups of 10, while the remainder have been grouped in a separate category. As we can see, the

10 biggest network operators combined (dark blue) account for more than 40 percent, the 50 largest (dark blue, brown, green, violet and light blue) for 75 percent, and the next 50 for almost 10 percent of the value of all declared installations, and they generate the corresponding network utilisation revenue (Figure 1). The remaining 600 network operators account for only around one-sixth of the total value of the installations in the distribution network. The proportion of generated network utilisation revenue (Figure 2) corresponds to the distribution outlined above. The relative importance of the network operators by company size remained unchanged in the period under review.

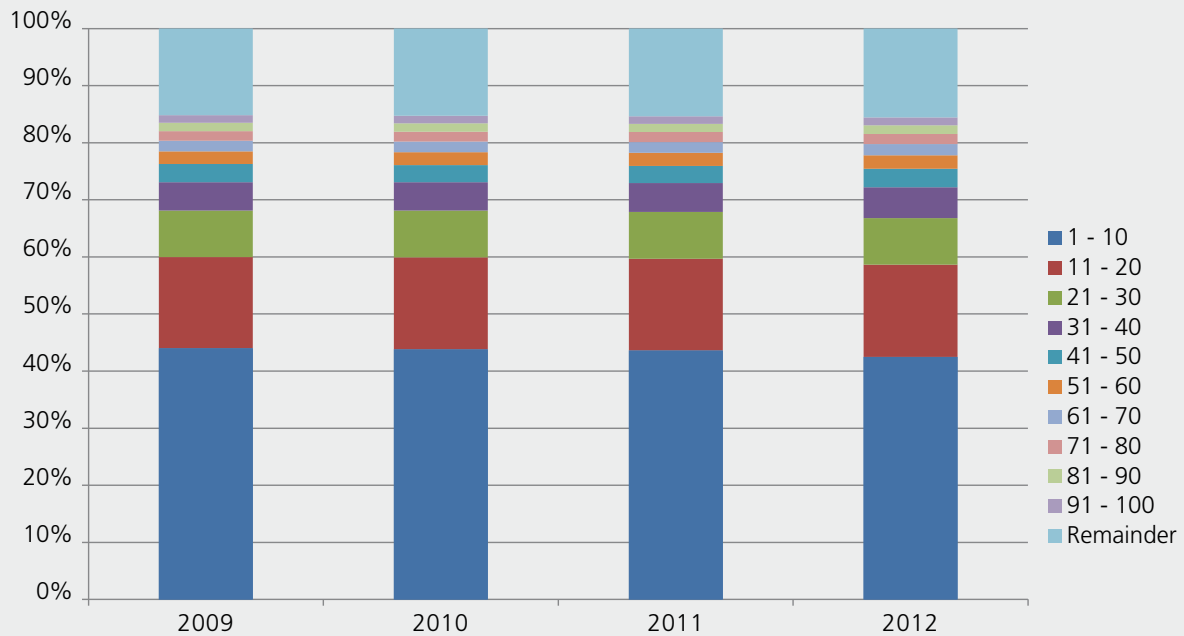


Figure 1: Proportional holdings in the distribution network by company size

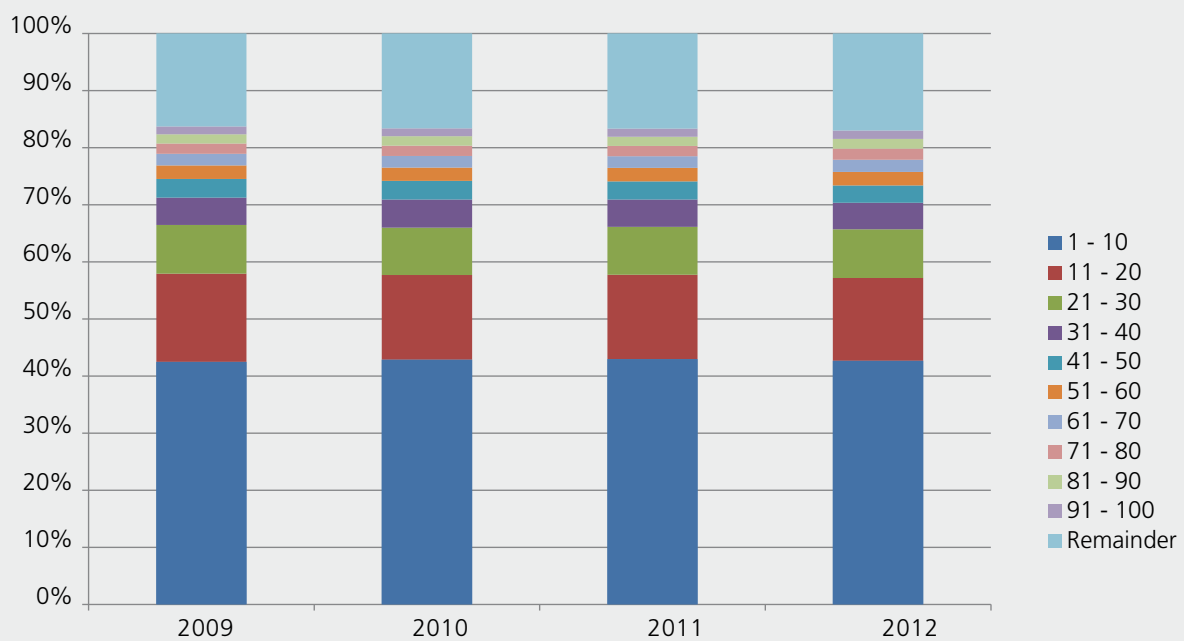


Figure 2: Proportion of network utilisation revenue by company size

Figure 3 shows the proportional composition of the network costs. Operating and capital costs each account for around 40 percent, while the remainder comprises fees and payments to the state, plus direct taxes. The relatively minor importance of taxes can primarily be explained by the fact that only 220, i.e. around two-thirds of distribution network op-

erators are subject to taxation. The tax paid by network operators amounted to a rate of around 2 to 3 percent – in 2012 the total was 84 million Swiss francs. It is notable that the proportion of costs represented by fees and payments to the state has risen from around 13 percent in 2009 to approximately 16 percent in 2012.

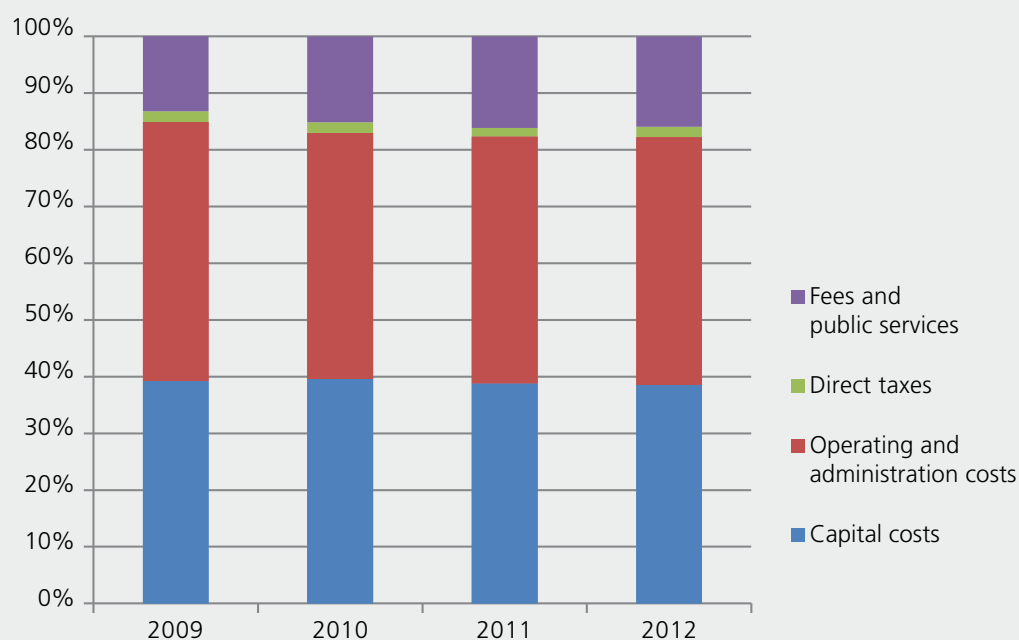


Figure 3: Breakdown of network costs

3.2 Transfer of the transmission network to Swissgrid

In January 2013, those large transmission network owners who had signed the respective agreements on contributions in kind at the end of 2012 transferred their networks to Swissgrid by assigning the shares of the involved companies. With respect to the transmission network owner who had failed to sign the agreement on contributions in kind in November 2012, Swissgrid petitioned ElCom to order the transfer of the network. ElCom upheld this petition and on 3 June 2013 ruled that the shares of the network operator must be transferred to Swissgrid. An appeal was lodged against this ruling with the Federal Administrative Court, and a decision was still pending as of the end of the year under review. The transfer of other non-divested components of the transmission network was carried out at the beginning of 2014.

Prior to the transmission network transaction, ElCom had specified the method of valuation of the facilities to be transferred. The associated ruling of September 2012 stipulated

that the valuation of the various transmission network components was to be based on the regulatory criteria that are applicable for pricing in the electricity supply legislation. This would have amounted to a value of around 2 billion Swiss francs. Various companies lodged appeals against this ruling so at the end of 2013 the Federal Administrative Court upheld these appeals and referred the matter back to ElCom for reconsideration. At the same time it specified a variety of criteria regarding the valuation method to be applied.

In August, ElCom also ruled that stub lines (with and without supply character) that are operated at the 220/380 kV level belong to the transmission network and have to be transferred to the ownership of Swissgrid. This ruling has meanwhile become legally binding. This means that uniform criteria are applicable throughout the country with respect to the allocation of stub lines to the transmission network, which now encompasses all lines and installations at the 220/380 kV level.

3.3 Network expansion and planning

ElCom has stipulated that network operators may under certain circumstances offset the voluntarily assumed costs for laying distribution lines. The entrepreneurial decision and responsibility for entering into a correspond-

ing contractual arrangement are incumbent on the network operators. For the purpose of examining the associated costs in specific cases, the main criterion is efficiency.

Investments in the distribution network

Within the scope of its supervisory duties, ElCom verifies whether sufficient investments are being made in order to maintain the electricity network in good condition. For the period from 2009 to 2012, the distribution network operators reported annual investments of around 1.4 billion Swiss francs, compared

with write-offs amounting to approximately 0.8 million (cf. Figure 4). Due to the fact that supply quality in Switzerland can be described as very good in an international comparison (cf. chapter 4.1) and that investments are significantly higher than write-offs, ElCom considers the investments as sufficient.

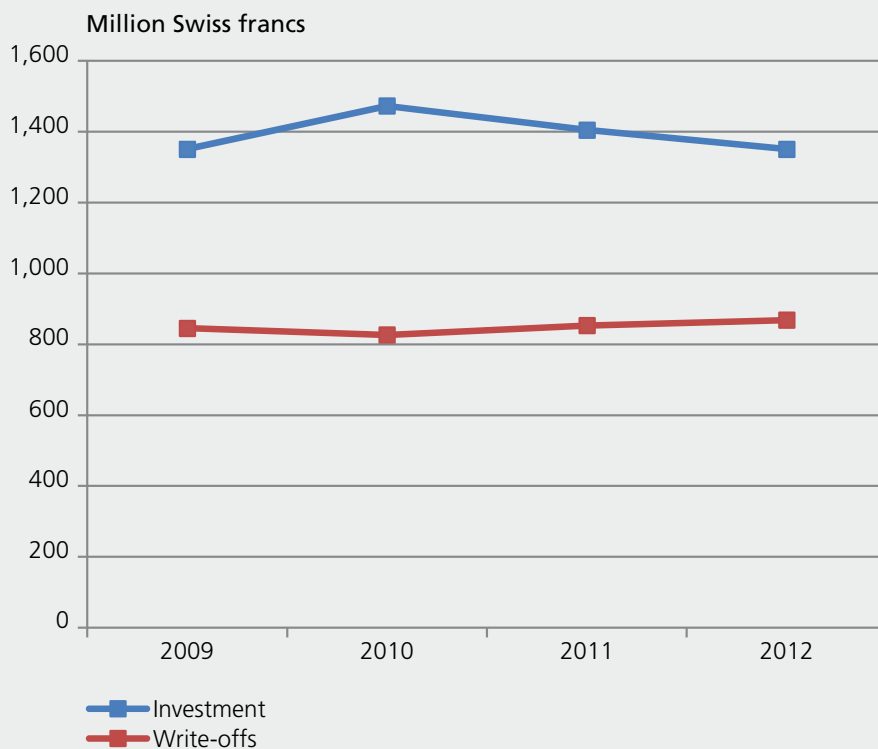


Figure 4: Trend in investments and write-offs in the distribution network

Long-term planning

Network operators are required to draw up long-term plans for the expansion of the network infrastructure, while Swissgrid is responsible for the planning of the overall transmission network. This arrangement is intended to ensure that the grid can be constantly maintained and expanded. ElCom assists Swissgrid with the preparation of its long-term planning and evaluates the plans from the point of view of recoverability for tariff calculation and in order to ensure that investments are distributed evenly in all regions of the country. In the year under review, ElCom was only able to hold discussions with Swissgrid regarding procedural issues relating to the nature and

assessment of the long-term planning. It was not possible to hold more detailed discussions during the year regarding the content of the long-term planning of the transmission network due to the activities relating to the transfer of network installations to Swissgrid, the revision of the planning instruments and the lack of associated documentation.

ElCom commented on the expansion plans produced by distribution network operators whenever uncertainties arose regarding the recoverability of the costs of the various expansion concepts.

3.4 Increase in network capacity

Additional network capacity may become necessary in order to connect producers of electricity from renewable energy sources to the grid. The costs are refunded by Swissgrid by taking account of them in the calculation of the system services tariff. For this reason, remuneration has to be approved by ElCom. Based on its initial practical experience, ElCom revised the corresponding directive in 2012, taking previous practice as well as the interests of the network operators into consideration. This directive functions as a set of guidelines for network operators for submitting applications and specifies the principles for their assessment. In particular it specifies the requirements with respect to documentation and the reporting of remuneration in the cost

accounting statement in greater detail and outlines the procedure for the step-by-step expansion of decentralised energy production systems. In the year under review, ElCom assessed 61 applications for remuneration of costs for necessary increases in network capacity. It also pronounced two rulings relating to further increases in network capacity. In the past four years it has ruled on a total of 91 applications for remuneration of costs for increases in network capacity amounting to around 18.5 million Swiss francs and involving a total production output of 123.4 MW. Table 2 presents an overview of the key data relating to increases in network capacity that are being financed via the system services tariff.

	Total	Photo-voltaics	Wind	Other forms
Minimum generator output [kW] ¹⁾	18	18	4,000	90
Maximum generator output [kW] ¹⁾	74,000	667	16,000	74,000
Total generator output [kW]	123,378	8,899	20,000	94,479
Average generator output [kW]	1,386	110	10,000	15,747
Minimum costs [Swiss francs] ¹⁾	7,141	7,141	1,805,003	19,311
Maximum costs [Swiss francs] ¹⁾	9,262,389	194,122	9,262,389	2,117,200
Total costs [Swiss francs]	18,404,710	4,215,532	11,067,392	3,121,786
Average costs [Swiss francs]	206,794	52,044	5,533,696	520,298
Minimum relative costs ²⁾ [Swiss francs/kW]	3	25	451	3
Maximum relative costs ²⁾ [Swiss francs/kW]	2,133	2,133	579	773
Average relative costs ²⁾ [Swiss francs/kW]	149	474	553	33

¹⁾ Per application/ruling

²⁾ Relative costs = ratio of costs to installed capacity

Table 2: Figures relating to rulings on network capacity increases (status: 31.12.2013)

	2009	2010	2011	2012	2013	Total
Applications	3	5	11	37	95	151
Brought forward from previous year	–	3	4	4	18	–
Rulings	–	4	10	20	57	91
Rejected	–	–	1	3	4	8
Written off	–	–	–	–	3	3
Pending as of end of year	3	4	4	18	49	–
Pending, 31.12.2013	–	–	–	–	49	49

Table 3: Number of rulings on network capacity increases (status: 31.12.2013)

4 Supply security



Switching station in Laufenburg

4.1 Quality of supply

One of the main indicators for a high degree of supply security is good network availability. In Switzerland, the trend in network availability has been closely monitored since 2010. ElCom uses the two standard international indices for carrying out its evaluation: SAIDI (System Average Interruption Duration Index) quantifies the average duration of interruptions per end consumer, while SAIFI (System Average Interruption Frequency Index) records the average frequency of interruptions per end consumer. The collected data concern

the duration and frequency of unscheduled interruptions that last longer than 3 minutes and are attributable to natural occurrences, human error, operational problems or intervention by third parties.

ElCom analyses interruptions at the 84 biggest Swiss network operators, which account for around 85 percent of the country's total energy output. As can be seen from Table 4, the number of unscheduled interruptions totalled 7,280 in 2012.

	2010	2011	2012	Unit
Interruptions	5,810	6,000	7,280	No. of unscheduled interruptions
SAIDI	14	16	22	Minutes per end consumer
SAIFI	0.28	0.28	0.34	Interruptions per end consumer

Table 4: SAIDI and SAIFI figures for 2010, 2011 and 2012

In 2012, the average duration of unscheduled interruptions per end consumer was 22 minutes. This represents an increase of 6 minutes compared with the previous year. The average frequency of unscheduled interruptions also rose in 2012, namely to 0.34. In both cases, the increase is primarily attributable to extraordinary climatic occurrences in January and February, including a major storm, intensive snowfall and an extended period of cold weather. The 2011 figures are more or less the same as those for 2010. Here, too, the slight increase in 2011 versus 2010 can be attributed to extraordinary climatic occurrences.

Despite the increase in the number of unscheduled interruptions, Switzerland still has a high level of network availability in comparison with other European countries. According to the official statistics of the CEER (Council of European Energy Regulators) in 2012, Switzer-

land was among the countries in Europe with the best network availability data.

Alongside a high degree of network availability, the level of available import capacity is also a key factor with respect to supply security. In view of this, ElCom keeps a close eye on the development of available cross-border capacity (referred to as net transfer capacity, or NTC). NTC indicates how much cross-border transport capacity is available with neighbouring countries without breaching safety standards. Swissgrid specifies this figure for all four Swiss borders together with the neighbouring transmission network operators. The proportion of the import capacity of the Principality of Liechtenstein, which belongs to control zone Switzerland, is included in the calculation of the import capacity from Austria. Table 5 presents an overview of the trend in available import capacity.

NTC	2008	2009	2010	2011	2012	2013	Unit
France	3,116	3,116	3,116	3,116	3,109	3,060	MW
Germany	977	1,018	1,055	1,087	895	965	MW
Austria	280	275	305	312	456	512	MW
Italy	1,383	1,513	1,721	1,721	1,724	1,726	MW
Total (Switzerland)	5,756	5,922	6,197	6,236	6,184	6,264	MW

Table 5: Trend in import capacity (NTC)

Between 2008 and 2013, the import capacity at Switzerland's four borders rose from 5,756 to 6,264 MW. The increase between 2008 and 2011 was attributable to an optimisation of permissible capacities from Germany, Austria and Italy. Following a recalculation of the NTC data at the borders between Germany and Switzerland and Austria and Switzerland, the permissible import capacities shifted slightly in favour of the net transfer capacity at the border between Austria and Switzerland. Generally speaking, the cross-border import capacities in Switzerland have remained

more or less constant and have contributed towards a high-quality and secure electricity supply.

In view of the high transit flows through Switzerland (from north to south), the available export capacity to Italy is also an important factor for Switzerland's supply security. However, this has been reduced in the past few years in order to maintain the stability of the Italian network. The trend in the export capacity to Italy is depicted in Table 6.

NTC	2008	2009	2010	2011	2012	2013	Unit
Italy	3,140	3,145	3,130	3,050	2,826	2,767	MW

Table 6: Trend in export capacity to Italy (NTC)

4.2 Supply security report

"Supply security is guaranteed when the desired quantity of energy is available in the entire network at the desired quality and at acceptable tariffs" (source: dispatch to Parliament concerning the amendment of the Electricity Act and the Electricity Supply Act).

In accordance with the Electricity Supply Act, ElCom is responsible for constantly monitoring supply security. This means that it has been officially entrusted with a mandate that is both important and complex. ElCom monitors and supervises the development of the electricity markets in order to ensure a safe and economical electricity supply in all parts of the country. In the event that the supply of electricity within the country should be seriously threatened in the medium or long

term, ElCom is required to propose suitable measures to be taken by the Federal Council for maintaining a secure supply of electricity. In order to fulfil this mandate, the Technical Secretariat of ElCom has developed a comprehensive method for monitoring short- and medium-term supply security and is currently working on its further development. In the past, ElCom has coordinated the findings obtained from this monitoring process with the involved players. The associated concept and the system delimitations derived by ElCom are based on the present-day status of legislation and the energy-policy planning of the Federal Council. The monitoring of supply security will take into account any amendments that may be made to these criteria.

4.3 Monitoring of the market

The monitoring of the market that was first carried out in 2010 with the aim of assessing potential risks in energy trading was repeated in 2013. The objective here was to assess the extent to which risks arising in association with energy trading activities could represent a threat to Switzerland's supply security. Such risks arise, for example, if a major energy supplier should hold a large number of speculative positions in its energy portfolio. Unfavourable price trends on the energy markets can then give rise to considerable trading losses, which under certain circumstances can result in a significant reduction of the company's equity capital. In order to assess the risk potential, a variety of key risk data were collected from Swiss energy supply companies

which carry out large-scale trading on the energy markets. As was the case following the initial survey, in the year under review ElCom again ascertained that no immediate risk to Switzerland's supply security exists as the result of energy trading by major Swiss energy suppliers. The evaluation of the collected data revealed that the tendency with respect to trade-related risks has in fact fallen since the previous survey. Measured against their equity capital, the companies concerned have reduced their risk positions. The market survey was a priori limited to trading risks and should therefore not be regarded as an assessment of the overall risk situation of the involved companies.

4.4 System services

In order to ensure that network operators are at all times able to fully perform their core tasks, namely the transmission and distribution of electricity, a broad variety of auxiliary services are required. These are collectively referred to as "system services". It is particularly important to constantly maintain a balance in the network between input and output of electricity so that an uninterrupted supply can be secured. For this purpose, the necessary power plant capacities have to be held in reserve so that the production of energy can be adapted at short notice to the demand situation. The procurement of this reserve energy by the Swiss transmission network operator, Swissgrid, is carried out in accordance with market-based principles. As an integral part of its duty to guarantee a safe and affordable supply of electricity throughout the country, ElCom also has to monitor and supervise the market for reserve energy.

In the past few years, the prices on the reserve energy market have been falling considerably, thanks in part to a variety of cost-cutting measures. In the year under review, however, average prices rose again for the first time from the low level of the previous year. This increase in average prices is primarily attributable to a sharp, temporary price hike in April. This situation is illustrated in Figure 5, which depicts the trend in the highest-priced secondary reserve energy (most expensive price for 20 MW). In past years, an increase in the price of reserve energy before the onset of the annual thaw in Switzerland has been observed more frequently, though not to the same extent as in the year under review. This phenomenon is plausible if we consider that most of the reserve energy in Switzerland is provided by hydropower plants. Low water levels in reservoirs and reduced run-of-river production result in a supply shortage, which in turn has an impact on pricing. As a consequence of the prolonged period of cold

weather in 2013, water levels in the reservoirs fell prematurely, and this meant that the supply of reserve energy was barely sufficient to meet the level of demand – with corresponding impacts on pricing. During this period, however, there was never an immediate threat to supply security, and once the thaw set in the situation soon returned to normal.

Modifications of the procurement concept and an increase in the degree of transparency regarding available power plant reserves are intended to contribute towards an increase in the liquidity of the reserve energy market in spring 2014 and consequently ease the situation.

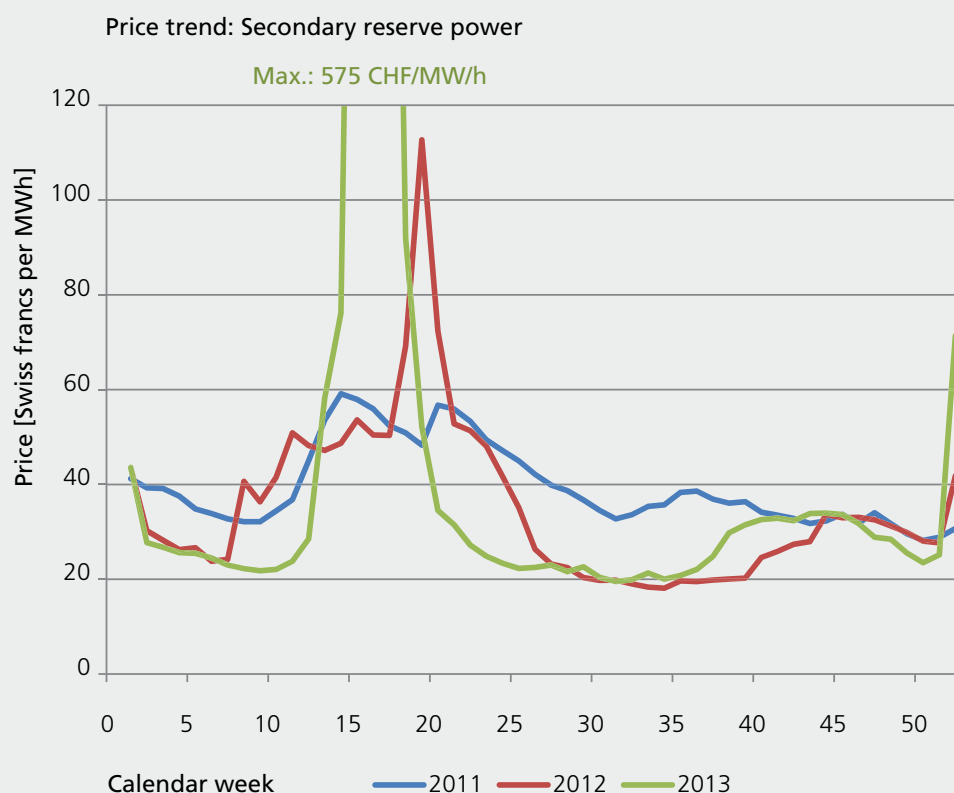


Figure 5: Price trend in the highest-priced 20 MW allocated secondary reserve energy

Another challenge ElCom had to deal with resulted from occurrences that arose during the 2012 Christmas period: The very low level of energy demand gave rise to a temporary decline in prices on the spot market. In Germany and France, prices fell into the negative range at times, whereas on the Swiss market, on which a defined minimum price of zero Swiss francs per MW applies, this was not possible. This constellation paved the way for some market players to realise opportunistic gains on the European spot and reserve energy markets through clever actions in contravention of the applicable regulations. Here, whether consciously or otherwise, the involved traders took the risk of destabilising the network. Together with the Swiss network operator, Swissgrid, measures were subsequently defined with the aim of preventing this kind of improper action in future. An important change was made: in order to eliminate false financial incentives negative prices are now also permitted on the Swiss electricity market. Although the increased cross-border cooperation in the European electricity markets is giving rise to efficiency increases it is also leading to new problems such as the following: due to the fact that the proportion of sharply fluctuating regenerative energy to electricity production is high in Germany, Switzerland's northern neighbour has to put aside significant conventional power plant capacities, particularly in winter, in order to also be able to sustain its electricity supply during periods of low solar radiation or in the event of low levels of production in coastal and mountain regions. Some of the power plant capacities required for this purpose have to be acquired abroad, and this means that, in the involved countries, there is a possibility that there will not be sufficient energy to meet the requirements of their own reserve energy market. Here, ElCom's duty is to find a balance between Switzerland's justified national inter-

ests and those of electricity supply companies operating on an open electricity market. This is a matter that ElCom will also have to focus on in the next few years.

In a recent ruling, the Federal Supreme Court stated that power plant operators are not obliged to pay a portion of the costs for the procurement of system services, and declared that the corresponding provision in the Electricity Supply Ordinance is not applicable. In view of this, in its own ruling dated 4 July 2013 ElCom instructed Swissgrid to refund all outstanding payments for system services for 2010 to the involved power plants. In the meantime, all power plants have received a refund of the amounts paid for system services in 2009 and 2010. Some power plant operators also claimed late payment compensation, and ElCom ruled that Swissgrid has to pay them five percent interest with effect from the date of the reminder. This ruling had not yet become legally binding as of the end of 2013.

In two other rulings, the Federal Administrative Court stated that the balance groups to which the Gösgen and Leibstadt nuclear power plants are allocated may not be billed for the costs arising in association with the retention of positive tertiary reserve capacity, and it thus repealed the corresponding order issued by ElCom in 2010. As a consequence of this ElCom reassessed another similar case. In accordance with another ruling by the Federal Administrative Court, owners of a cross-border connecting line cannot be billed for costs associated with idle energy. The Court did not rule on the question of whether a sufficient legal basis exists for billing individual system services to parties that are not end consumers.

5 The Swiss electricity market



More and more end consumers who are entitled to do so have been switching to the free market. This trend persisted in the year under review.

5.1 Market situation

In the initial stage of market liberalisation, only large-scale consumers with an annual consumption of at least 100 MWh may choose their supplier themselves. The group of large-scale consumers accounts for around half the total electricity consumption in Switzerland. In order to calculate the number of end consumers on the free market, ElCom conducted a survey among the 80 biggest distribution network operators, which together account for around 80 percent of the overall market (approximately 53 TWh excluding public transport). As shown in Figure 6, in the first few years after the opening of the market (up to and including 2011), very little use was made of this option: Within the networks of the surveyed operators, around 28,000 end consumers would qualify for access to the free

market, but only around 7 percent of them actually made use of this entitlement (red curve). The total electricity consumption of these end consumers amounts to around 19 TWh. At 13 percent, the proportion of the energy volume (blue curve) is twice as high, which shows that the involved consumer group is very large. In the course of the following two years, the corresponding proportions doubled to 13 and 26 percent respectively. Thanks to favourable market prices in the year under review the number of consumers switching to the free market with effect from 2014 rose sharply again, and consequently the proportions for next year will roughly double again to 27 and 47 percent respectively (around 7,500 end consumers with a volume close to 9 TWh).

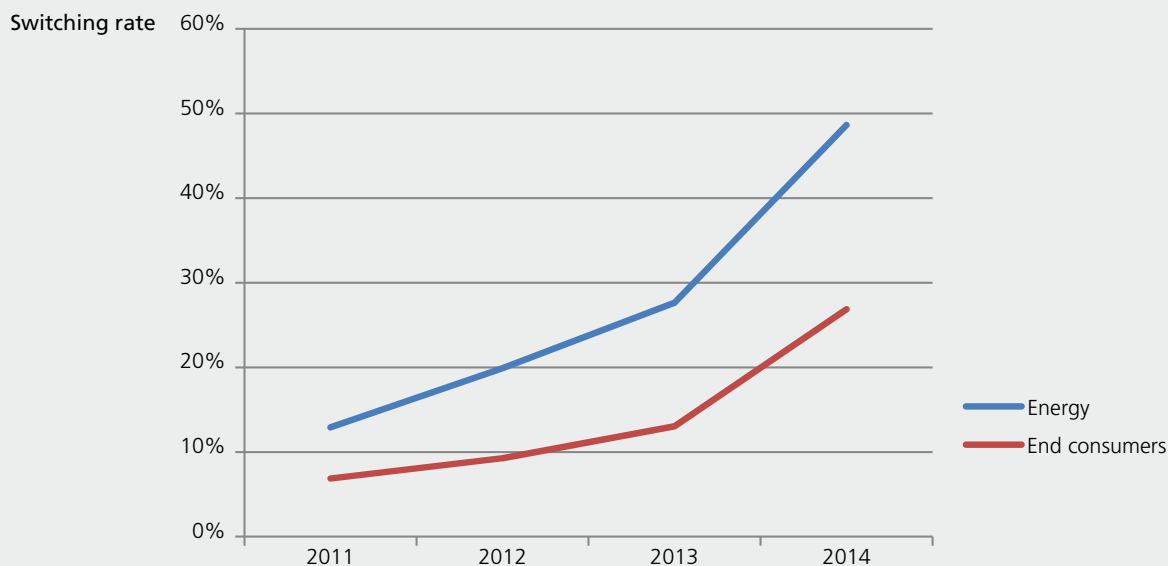


Figure 6: Transfer to free market

As we can see in Figure 7, the 10 biggest network operators (dark blue) account for around 40 percent of the total quantity of electricity that is distributed to end consumers via the distribution network. If we extend the figures to the 50 biggest network operators (dark blue, brown, green, violet and light blue),

we can see that they account for around three-quarters of the supplied energy. The next 50 network operators combined account for one-tenth, while the remainder account for one-sixth of the energy supplied to end consumers.

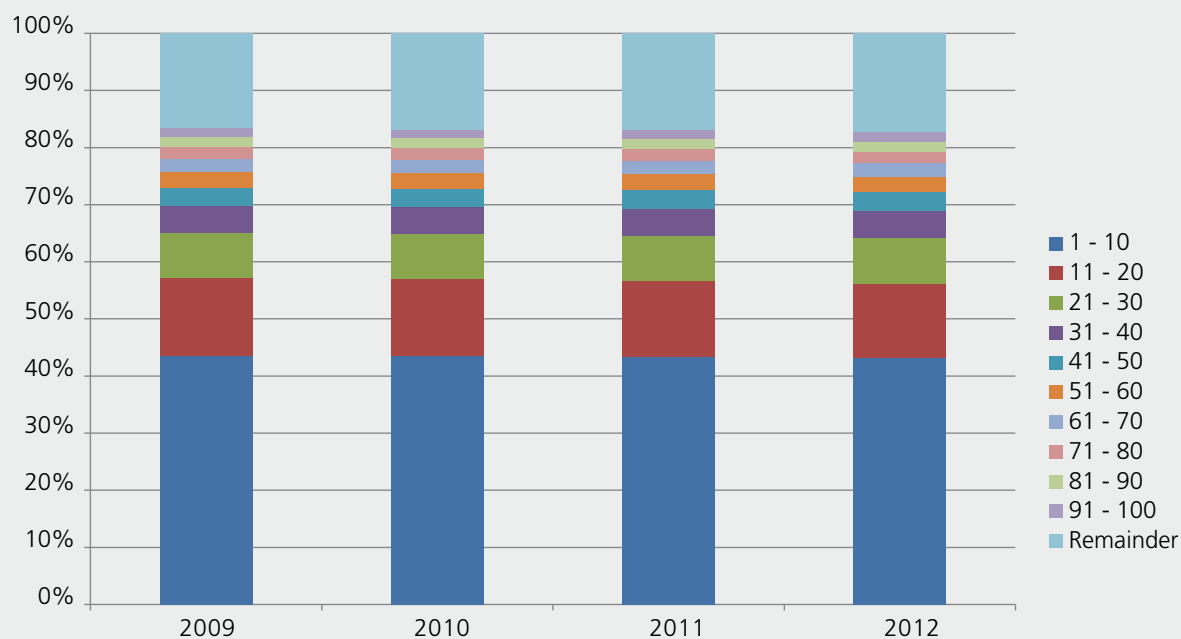


Figure 7: Proportion of energy supplies via the distribution network by company size

The structure in Figure 7 is almost identical to that depicted in Figure 1, but it does not always represent the same companies.

5.2 Transmission network tariffs

In May 2013, ElCom published the 2014 tariffs for the use of the transmission network. After carrying out a summary examination, ElCom decided that no precautionary reduction of tariffs was required. The Federal Supreme Court and Federal Administrative Court published important rulings relating to network valuation and the costs of system services, and these have meanwhile become legally binding and are at least partially reflected in the 2014 tariffs.

In particular, the rescission of the rulings regarding the 2009 and 2010 power plant tar-

iffs gave rise to a marked one-time increase in the tariffs for system services: In 2014, Swissgrid will be adding a rescission surcharge of 0.3 cents per kWh to the normal general system services tariff of 0.34 cents per kWh.

Furthermore, the Federal Council resolved to increase the weighted average cost of capital (WACC) to 4.7 percent, and the interim clause granting a reduced WACC for older installations expired. The combination of court rulings and increased WACC resulted in significantly higher network tariffs.

5.3 Distribution network tariffs

Since the tariffs for 2014 were already published at the end of August 2013, it is possible for them to be commented on here and compared with those for the year under review. The overall tariffs for households rose slightly by 0.4 cents to 19.8 cents per kWh (cf. Figure 8, which shows the figures for consumer profile H4, i.e. a household with an annual consumption of 4,500 kWh). This increase is attributable to the increase in network tariffs by 0.5 cents per kWh to 9.7 cents per kWh resulting from the various court rulings and higher WACC (see previous paragraph dealing with transmission network tariffs). The total network use remuneration of all network op-

erators is expected to increase by 0.5 billion Swiss francs, or 10 percent, from 4.4 (2013) to 4.9 (2014) billion. In addition, fees to the state have been increased by around 0.1 cents per kWh on average, as have the federal fees for the promotion of renewable energy and the protection of bodies of water and fish populations (included collectively in Figure 8 under "Feed-in remuneration at cost"), which has increased by 0.15 cents to 0.6 cents per kWh. By contrast, the average energy price fell by 0.5 cents to 8.4 cents per kWh. Overall, the current tariffs for category H4 are now back at the same level as they were at the time the Electricity Supply Act entered into force.

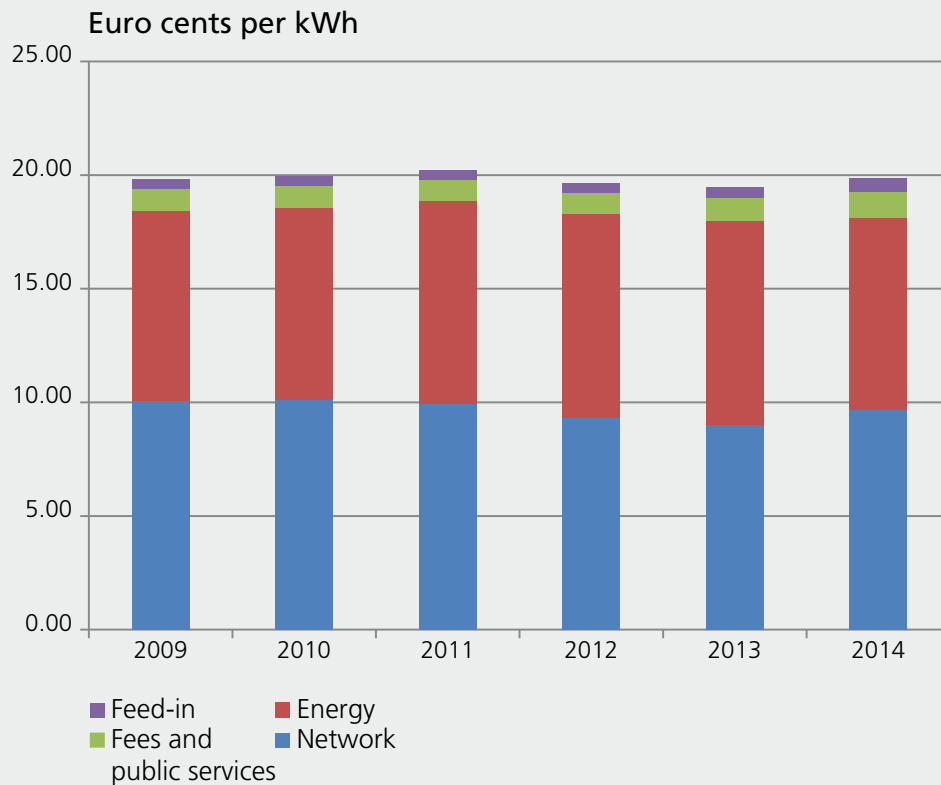


Figure 8: Cost components of the overall electricity price for consumer profile H4 (excluding value-added tax)

In the course of the past five years, the average cantonal costs for network use and energy have not changed significantly (cf. Figures

9 and 10). The approximation of tariffs that was observed last year with a view to 2014 has thus been reversed.

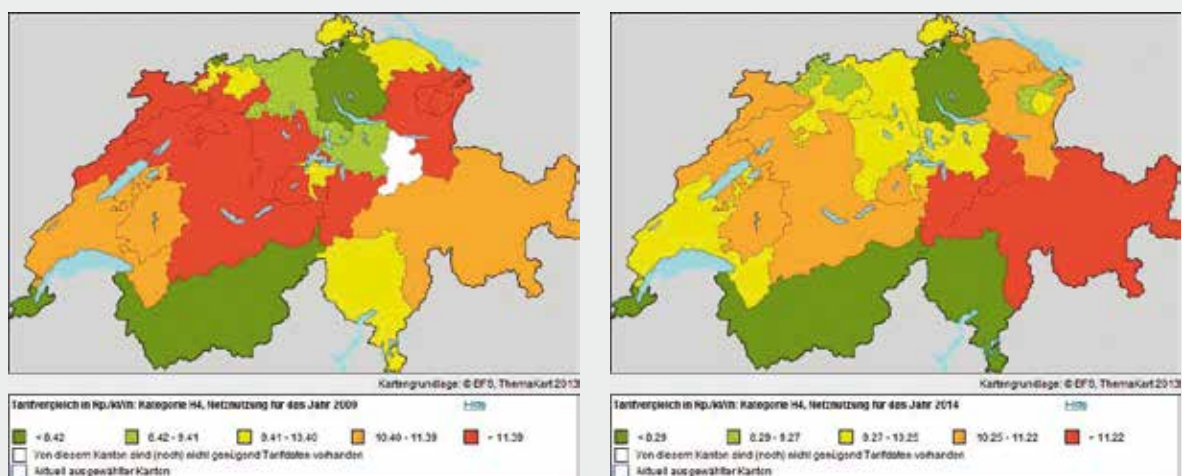


Figure 9: Comparison of average cantonal costs for network use for consumer profile H4 in 2009 and 2014

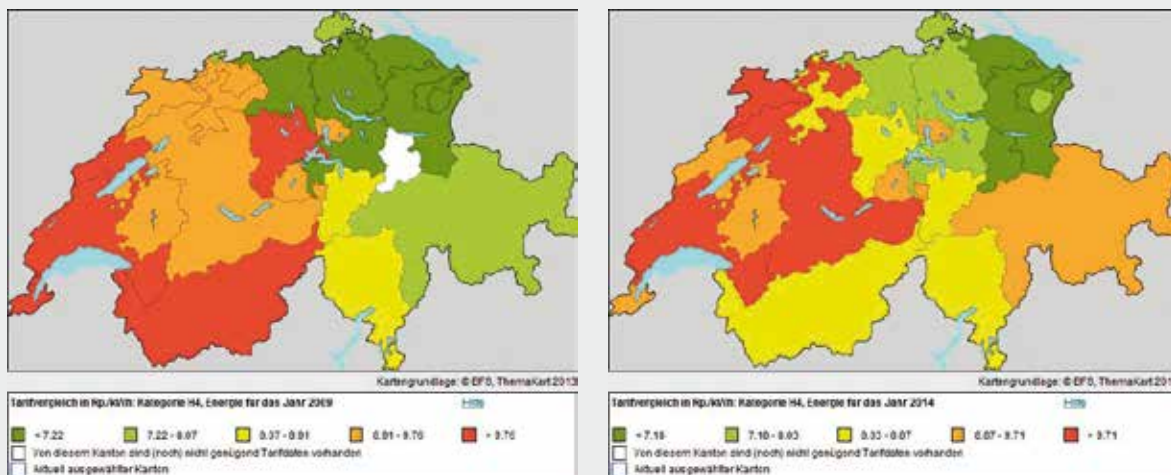


Figure 10: Comparison of average cantonal costs for energy for consumer profile H4 in 2009 and 2014

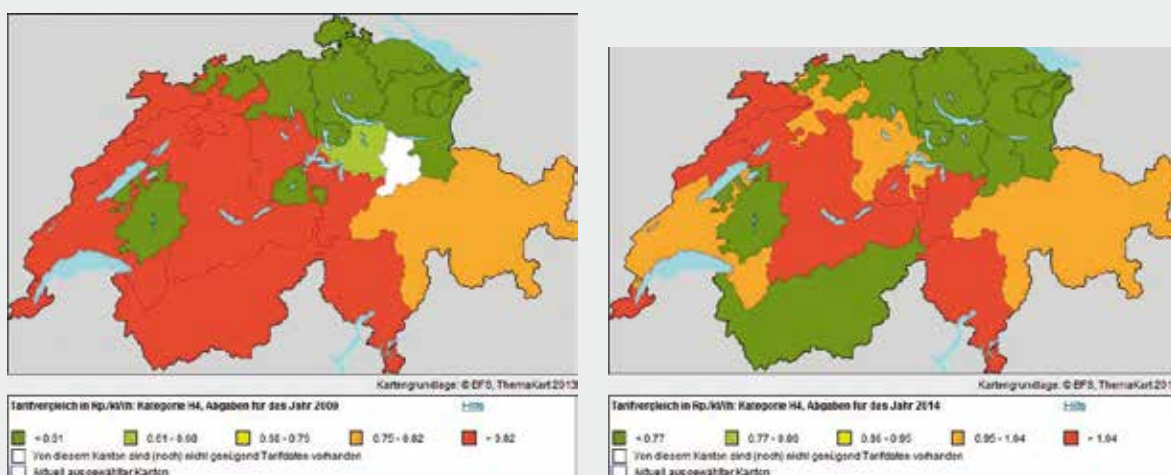


Figure 11: Comparison of average cantonal costs for fees and payments to the state for consumer profile H4 in 2009 and 2014

With respect to the fees and payments to the state (cf. Figure 11; here the federal fees for the promotion of renewable energy and protection of bodies of water and fish populations are excluded), it is interesting to note that there are primarily high and low figures,

but very few in the middle. Unlike the costs for network use and energy, the level of fees and payments to the state is not determined by ElCom, but rather through the cantonal and municipal political process.

ElCom examined the conformity of the tariffs in four different ways:

- » All network operators receive a detailed assessment of their cost accounting. They are then requested to rectify any errors that may have been identified and to check implausible figures and either substantiate them or, if necessary, adjust them. All network operators who submitted their cost accounting on time or after the first reminder received an assessment in the year under review.
- » Network operators who submit unlawful or implausible figures are audited in the specific areas in question. While in previous years the main focus was on a high proportion of synthetic network values, in the year under review the audits focused on missing calculations of differences in cover in the area of energy, incorrect price indices, a too-high interest rate in the network and infringements of the "95 Swiss francs" rule. The latter stipulates that the balance of costs and profit in the area of energy distribution has to be examined if it exceeds 95 Swiss francs per invoice recipient. Out of a total of 69 such cases, 39 were concluded without formal proceedings, 10 are still pending and the remaining 20 will be examined in 2014. These cases concern a total of around 1.6 million end consumers.
- » The entire spectrum of network and energy costs has to be examined in depth (energy costs only for end users with basic supply). Here, two cases were fully concluded with a ruling, and in three further cases partial rulings were pronounced regarding operating and energy costs.
- » In the year under review, ElCom began to examine information provided by network operators for various parameters such as level of tariff, applied interest rate and compliance with the "95 Swiss francs" rule. As of the end of 2012, 546 network operators had submitted their full documentation for the specification of the 2013 tariffs. In 86 cases everything was found to be in order and ElCom notified the operators concerned that it would not be opening proceedings against their tariffs next year in its capacity as regulator. The corrected cost accounting documentation for the 2013 tariffs subsequently submitted by the other network operators was examined again in spring 2013 and the same decision as cited above applied in a further 43 cases. Towards the end of the year under review, ElCom again carried out these summary audits on the basis of cost accounting documentation and tariff data for 2014 and was able to confirm its positive findings to 93 network operators.

In the year under review, the following aspects were examined in more detailed tariff audits:

Valuation of network: In view of various rulings by the Federal Supreme Court and Federal Administrative Court in 2012 and 2013, ElCom modified its practice relating to synthetic network value. On the one hand, synthetic valuation is usually accepted, and on the other hand network operators can waive the deduction of 20 percent that applies in

accordance with Article 13, paragraph 4 of the Electricity Supply Act if they demonstrate that the synthetic values do not exceed the historical figures. A variety of issues relating to valuation were still pending, and in the majority of cases this gave rise to considerable delays in the proceedings.

Installations which were correctly written off faster than today or financed via the operating costs prior to the entry into force of the Electricity Supply Act could be re-valued after

the Act entered into effect. This means that these installations can be depreciated and become subject to interest again, and thus billed to clients. ElCom declared in a ruling that this practice is no longer permissible following the

entry into force of the Electricity Supply Act. In view of this, costs can now only be applied for tariff calculation purposes either as operating or as capital costs.

Operating costs: The majority of required adjustments concerned the distribution of costs by segment and recoverability per se. The distribution of costs by segment is often carried out via allocation of common costs which have to be plausible and comprehensible. In some cases, the costs are distributed via internal allocation. Here, the common costs charged to the network were frequently too high.

Alongside the distribution of costs, there is also the question of recoverability per se, or duplicate charges: In the year under review, costs that have nothing to do with the operation of a secure and efficient network had to be adjusted, for example for marketing. In one case, cost components were found that were booked via internal charges in their effective amount as well as in the form of imputed costs, i.e. they were effectively duplicated.

Energy costs: Here the focus was on differences in cover and profit relating to distribution. Network operators already had to specify the tariff in summer 2012, although at the time they did not yet have all the relevant data at their disposal, including the costs of own production, purchase prices and the exact quantity of energy sold to end consumers. In view of this, ElCom requires network operators to calculate the effective costs and revenue after closure of the tariff year. If they have received too much and thus attained a surplus, they are required to reduce this in subsequent years by cutting the tariff. And vice versa, if they have received too little income they may subsequently offset shortfalls by increasing tariffs for end consumers. Some

network operators failed to calculate differences in cover for energy. They were therefore ordered to make the necessary calculations and, in the event that they had attained a surplus, to refund the end consumers accordingly.

In one case, even after adjustment the distribution costs including profit were well above the threshold of 95 Swiss francs per end client, which is the criterion applied by ElCom. A comparison with the other network operators shows that distribution costs including profit of more than 150 Swiss francs indicate unexploited efficiency potentials. The corresponding ruling was referred to the Federal Administrative Court and is not yet legally binding.

5.4 Judicial practice

The following basic principles relating to network valuation and tariffs were established by judicial practice at the Federal Administrative Court and the Federal Supreme Court in the year under review:

- » Only installations that have been budgeted and are not yet in the construction stage may be omitted from the calculation of network costs.
- » Purchase prices are not classified as original acquisition and production costs and therefore cannot be included under network costs.
- » With respect to real estate, it is not the market value that is of relevance for the calculation of network costs, but rather the acquisition price that was paid at the time of construction of the installation, and it remains unchanged throughout the entire useful life of the facility.

In addition, the criteria concerning synthetic valuation were defined in greater detail:

- » Synthetic valuation has to be carried out in accordance with a standard procedure.
- » For installations in the transmission network that are valued on the basis of the "swiss-asset" method and back-indexed using the Höspile Index, a deduction of 1.47 percent has to be made. If the PPI is used instead of the Höspile, the applicable deduction is 12.7 percent.
- » If distribution network operators are able to demonstrate that synthetically valued installations are not overvalued, a deduction does not have to be made. For this purpose, a representative selection of own installations has to be submitted that per-

mits a comparison between the effective construction costs and the synthetically calculated value.

- » It is unlikely that the prerequisites for a synthetic valuation of real estate can ever be met, because the receipts relating to the purchase of the property have to be retained indefinitely at the land registry.

The courts also ruled on those cases in which a company may apply the synthetic method. For example, as sufficient grounds for the lack of original receipts they acknowledged:

- » That certain projects, system components and costs for internal services have never been capitalised;
- » That for installations that are older than ten years there is no obligation to retain documentation;
- » That the installations were constructed decades ago;
- » That the network operator purchased the network and did not construct it;
- » That the lines are not the sole property of the network operator.

Tariff audit proceedings may be opened on the basis of a report or by ElCom in its capacity as regulator. In two rulings, the Federal Administrative Court found that ElCom was not authorised to rule in a specific case upon petition of end consumers regarding tariffs. While an end consumer is entitled to lodge a complaint with ElCom, it is the latter who has to open proceedings in its capacity as regulator. As complainant, an end consumer does not have the rights of a party in the proceedings. The Federal Administrative Court subsequent-

ly qualified this ruling in a decision in which it somewhat vaguely noted that this restrictive description of the authority of ElCom was not binding. Thus the authority of ElCom and the

status of end consumers in such proceedings will have to be defined more specifically in future rulings.

5.5 “Sunshine” regulation

Since the introduction of the Electricity Supply Act in 2008, the regulatory practice that has arisen in Switzerland is largely based on two pillars. The first pillar is the examination of documentation for the specification of tariffs (cf. section 5.3 above). This takes the form of individual audits, which are time-consuming and personnel-intensive both for the company concerned and for ElCom. The second pillar concerns information for the interpretation of the applicable electricity supply legislation. ElCom supports electricity supply companies by providing feedback on cost accounting, directives, notifications, information events and other forms of information aimed at ensuring they act in accordance with the relevant legal provisions.

In Switzerland, the electricity industry has always been characterised by a high degree of heterogeneity. Out of a total of around 700 network operators, only nine supply more than 100,000 end consumers, and almost half have less than 1,000 end clients in their supply area. Against this backdrop, ElCom is examining regulatory criteria that are in line with the heterogeneity of the network operators. In the year under review, it decided to examine the possibility of introducing a “sunshine” regulation and develop concepts for implementation in Switzerland with the objective to create greater transparency. All network operators would be subject to a standardised and transparent comparison process based on various indicators. Thanks to the resulting increase in transparency it would be possible to generally render the quality and cost-effec-

tiveness of the electricity supply more visible and encourage public debate on this issue. This would help ensure that network operators act in compliance with the applicable electricity supply legislation without the need for the regulator to directly intervene. Those network operators who produce unsatisfactory results would be urged to take steps to eliminate identified weak points.

In its selection of criteria for the comparison process, ElCom decided in favour of a multidimensional solution that departs from a strictly cost-related viewpoint. Based on existing international standards it is proposing indicators in four target areas:

1. Reasonable costs and tariffs: comparison of energy tariffs (similar to the existing ElCom electricity website) and network costs.
2. Supply quality: number of interruptions, maintenance of voltage levels, etc., in the electricity network.
3. Competition-based electricity market: do any restrictions exist that prevent smooth changeover processes, e.g. excessive measurement costs?
4. Compliance: are the applicable legal provisions, directives and rules of behaviour being complied with?

The aim here is for these indicators to be applied for evaluating the quality and efficien-

cy of services provided by network operators as accurately as possible. But the indicators should also awaken public interest and be communicated comprehensibly in order to bring about a response from the public.

Within the framework of a consultation procedure, in 2013 ElCom invited the Swiss Federal Office of Energy (SFOE) and representatives of consumer organisations and the electricity industry to put forward their own ideas and proposals regarding the selection criteria for indicators and their practical implementation. Once the indicators will have been defined, the proposal foresees introducing the process in two stages with the aim to carry out trial runs in 2014 and 2015 without publishing the results. ElCom will then take a decision concerning the introduction of the “sunshine” regulation, duly considering the extent to which the applicable legislation permits the publication of the survey results.

ElCom firmly believes that, as a relatively mild form of regulation, the proposed concept would represent a reasonable and appropriate supplementation of the current regulatory practice for network operators of all sizes. It

would make it possible to effectively encompass a significantly larger number of companies in a relatively uncomplicated manner.

A limitation to price regulation alone would be an unsatisfactory solution. The fact that the proposed multidimensional concept takes account of the aspect of quality is one of its strengths and results in significant added-value. Furthermore, the equal weighting of all dimensions lessens the risk that costs could be reduced to the detriment of quality. It may be assumed that the proposed “sunshine” regulation would be sufficiently effective for the majority of network operators. However, experience at the international level has demonstrated that it cannot be used to substitute conventional forms of regulation, but rather to merely supplement them and therefore ElCom will have to continue to carry out tariff audits in future.

The move in the direction of the proposed “sunshine” solution is based on the present-day Electricity Supply Act and will not affect the political decision regarding the introduction and possible forms of an incentive regulation.

5.6 Network access

In response to petitions by involved end consumers and their new provider, ElCom pronounced a number of rulings granting various consumption locations access to the network that had been refused by network operators. In this connection, ElCom underscored the fact that it is not the measurement point that enters the market, but rather the consumption location. The term “consumption location” refers to the operating premises of an end consumer which forms an economic and local unit and indicates its own effective annual consumption, regardless of whether it is equipped with one or more input or output points. ElCom ascertained that companies that are affiliated to a group qualify as “economic units”. In order to gain access to the network, a consumption estimate is sufficient. On the other hand, a load output measurement device with automatic data transmission must be installed at each consumption location as soon as the site concerned is supplied by a third party provider. If, however, several consumption locations have in the past obtained their energy via one or more shared output points, they may be equipped with a single shared load output measurement device with automatic data transmission as long as all involved end consumers are in agreement and they each have an annual consumption of at least 100 MWh. The companies concerned contractually regulate the choice of shared provider and the distribution of costs. In this way, the high costs for the installation of new equipment can be avoided. With respect to

measurement, the network user bears the costs for the adaptation of the in-house installations (before the connection point), while the network operator is responsible for ensuring that a load output measurement device is installed. The measurement services may also be provided by a third party.

In another case, ElCom granted an end consumer access to the network which had been refused by the operator on the basis of the argument that a twelve-month period of notice as of the end of the year had been specified in the agreement concluded in 1983. ElCom ruled that the provision stipulated in the Electricity Supply Ordinance takes precedence and that the notice dated 31 October 2012 to terminate the agreement as of 31 December 2012 was therefore sufficient. ElCom pointed out that the purpose of the electricity supply legislation is to create the prerequisites for an electricity market. This means it takes precedence over contractual clauses that were negotiated long before the electricity supply legislation was adopted.

In two rulings, ElCom rejected applications for provisional network access as of 1 January 2014. In both cases, ElCom did not have sufficient documentation at its disposal to determine whether a construction consortium qualifies as an economic and local unit so it was not clear whether the consortium formed an impermissible grouping of end consumers. This matter will now be more closely examined in court.

5.7 Feed-in remuneration at cost

In 2013, ElCom ruled for the first time on a case concerning an application for the refund of surcharges on transmission costs that can be collected from large-scale consumers (Article 15b, paragraph 3 of the Federal Energy Act). ElCom ruled that the six-month deadline stipulated in the Federal Energy Ordinance for claiming refunds must be complied with. Here it referred to the binding nature of the applicable reporting deadlines regarding the progress of the project and its start-up in order to qualify for financial support for feed-in remuneration at cost, which is also regulated at the ordinance level. In exceptional cases, however, an extension or reinstatement of missed deadlines is conceivable.

In 2013, referring to the principle of good faith and the inadmissibility of an undue adherence to formality, the Federal Administrative Court ruled that Swissgrid should not have limited itself to pointing out to the management of a project relating to feed-in remuneration at cost that the deadline for reporting the progress of the project had expired. Instead, Swissgrid should have drawn attention to the consequences of the failure to deliver a complete report, namely the revocation of the positive decision. The project management would then have been prompted to request an extension of the deadline. In an amendment to the ruling pronounced by ElCom, the Federal Administrative Court therefore instructed Swissgrid to reincorporate the applicant into the “feed-in remuneration at cost” programme.

6 International activities



The Rheinau hydropower plant on the border between Switzerland and Germany

6.1 Congestion management

At many national borders within Europe, congestion can arise as a result of cross-border electricity trading, and this means that the available network capacity can limit the supplies of energy required by the industry. The award of network capacity is carried out in the form of explicit auctions in accordance with market-based principles. In Switzerland, cross-border electricity trading is of considerable importance for the economy as well as supply security, and in view of this an efficient and fair method of congestion management is essential for the country's economy.

During the past six years (from 2008 to 2013), the cross-border network capacities available for trading have remained more or less constant. With respect to imports into Switzerland from France, Germany and Austria, which have meanwhile become susceptible to congestion, a slight shift has taken place in favour of capacity at the Austrian instead of the German border. And since the production of non-regulatable, renewable energy in

Italy has increased, in the year under review the export capacity from Switzerland to Italy had to be more frequently reduced than in the past. By reducing imports in a targeted manner, the Italian network operators ensured that regulatable Italian power plants were able to remain on the network in order to assure domestic supply security and did not have to be switched off due to the availability of cheaper imported electricity.

At the end of June, a new and more efficient system for allocating available short-term capacities was introduced at the borders with France and Germany. For this "intraday" trading system, capacities no longer have to be exclusively explicitly purchased by auction. Instead, the cross-border network capacity can also be implicitly awarded together with the actual energy business. Traders are now making a great deal of use of this new option. In order for the more efficient implicit award of capacity (also referred to as market coupling) to also be introduced into "day-ahead"

trading, which is considerably more important in terms of volume, it is necessary to designate an electricity exchange for the Swiss market. Swiss transmission network operator Swissgrid was able to reach an agreement with German-French exchange service provider EPEX Spot concerning the creation of the technical requirements for market coupling with these neighbouring countries.

Exceptions for the market-based award of cross-border transmission network capacity exist in particular at the border with France. In the long-term energy supply agreements between France and Switzerland, a large portion of network capacity is already reserved, which means it does not have to be purchased by auction. For historical reasons, these agreements contain clauses that permit a short-term modification of the supply quantity. But these options obstruct the efficient use of the capacity at the border because the network operators include margins for error in their simulation of load flows. ElCom worked together with French regulator Commission de Régulation de l'Énergie (CRE) and the holders

of the long-term contracts in order to improve this situation.

In addition to electricity imports and exports, a significant quantity of energy also flows in transit via the Swiss transmission network and the related costs are partially offset via a compensation mechanism (Inter Transmission System Operation Compensation, or ITC) that is applicable throughout Europe. In accordance with the ITC Agreement, a deduction is made for those network capacities that are regulated in long-term agreements and therefore cannot be awarded according to market-based procedures. This results in reduced proceeds for Swissgrid, which in the past it had billed to the holders of long-term agreements. The Federal Administrative Court decided that this practice was not permissible. This in turn means that the costs for transit services, which in any case are not financed in accordance with the principle of user pays, are increased again for Swiss end consumers. In view of this, ElCom intends to review the question of financing in its assessment of the further expansion of the transmission network infrastructure.

6.2 Border power plants

A total of 30 hydropower plants located at Switzerland's borders are designated as border power plants. This does not include the "Inn" hydropower plant project in Lower Engadine, which is being developed by Austrian and Swiss partners. The production of hydropower from bodies of water at the country's borders is regulated through bilateral treaties, some of which were concluded in the eighteenth century. These border power plants range in size from very small (e.g. Wunderklingen, in the municipality of Hallau, canton of Schaffhausen) to very large and complex (e.g. Emosson pump storage plant in the canton of

Valais). Due to the fact that produced energy is dependent on network integration and the operating status of the power plant, it cannot always be equally supplied to both entitled countries and consequently is imported or exported via the transmission network. For this purpose, Swissgrid grants priority to the operators of the power plants, which means that the network capacity required for cross-border delivery does not have to be purchased by auction. In the year under review, the ruling that was pronounced in 2011 concerning the granting of export priority for energy from the Hinterrhein power plant to which Italy is en-

titled was confirmed for a further two years. Furthermore, the systematic examination of all border power plants and the entitlement to priorities regarding cross-border transmis-

sion of electricity produced from these plants, which was initiated in 2012, was concluded in the year under review.

6.3 Market transparency

In accordance with EU Regulation No. 1227/2011 on wholesale energy market integrity and transparency (EU "REMIT" Regulation), market manipulation and insider trading have been banned within the EU since the end of 2011. REMIT also contains provisions that oblige market participants to pass on potential insider information, fundamental data (capacities, availabilities) and records of transactions carried out on the wholesale market to EU authorities, notably ACER (Agency for the Cooperation of Energy Regulators), or to the national regulatory authorities of the member states. A corresponding system for monitoring the electricity and gas markets is to be introduced in the EU in the course of 2014.

Since Swiss market participants are also active in the EU, they too have to comply with the requirement of reporting to ACER and publishing potential insider information. Thanks to the addition of a corresponding clause in the Electricity Supply Ordinance of 30 January 2013 it was possible to avoid a situation in which ElCom would receive less information than ACER and the regulators of the EU member states. In such a situation, within the scope of its coordination of the Swiss mar-

ket with ACER and other foreign authorities, ElCom would have less information at its disposal about Swiss players than the authorities in the EU would possess. In order for ElCom to be able to perform its duty as supervisory authority for the Swiss market, Swiss companies are now required to submit the same data to ElCom as they provide to the EU authorities in accordance with REMIT. This regulation entered into effect on 1 July 2013. However, since the provision of data has not yet been initiated in the EU, Switzerland is also awaiting further developments.

In order to process the data in question, ElCom is also required under the Electricity Supply Ordinance to develop the necessary infrastructure, i.e. a suitable data processing system, and it initiated the corresponding preparatory work for this in the year under review.

For the purpose of anchoring the cited regulations in the corresponding legislation, the Swiss Federal Office of Energy (SFOE) formulated the draft of a Federal Act on the Integrity and Transparency of the Wholesale Electricity and Gas Market.

6.4 Auction proceeds

In accordance with the applicable legislation, ElCom decides how revenue from market-based allocation procedures is to be used. For example, 30 million Swiss francs from the auction proceeds from 2009 were used for reducing the tariff at

network 1 level, and the remainder is to be used for the maintenance and expansion of the transmission network. The transitional clause included in Article 32 of the Electricity Supply Act would in fact permit ElCom, under certain circumstanc-

es, to allocate the auction proceeds from 2009 to the owners of the transmission network, but ElCom decided against this option. An appeal was lodged against this decision, but the Federal Supreme Court ruled in ElCom's favour. ElCom used 40 million Swiss francs from the auction proceeds from 2010 and 2011 for reducing the network level 1 tariff, and the remainder is to be used for the maintenance and expansion of the transmission network. Since Swissgrid was not yet owner of the transmission network in 2011, this amount was allocated to the previous owners for the maintenance and expansion of that

network. ElCom also used 40 million Swiss francs from the auction proceeds from 2012 for reducing the network level 1 tariff, but has not yet definitively decided on the use of the proceeds from the year under review.

Figure 12 shows how the auction proceeds generated at Switzerland's borders have been allocated. The increase in revenue is attributable to the general market situation, but also to the additional capacity that has been available on the market since 2012.

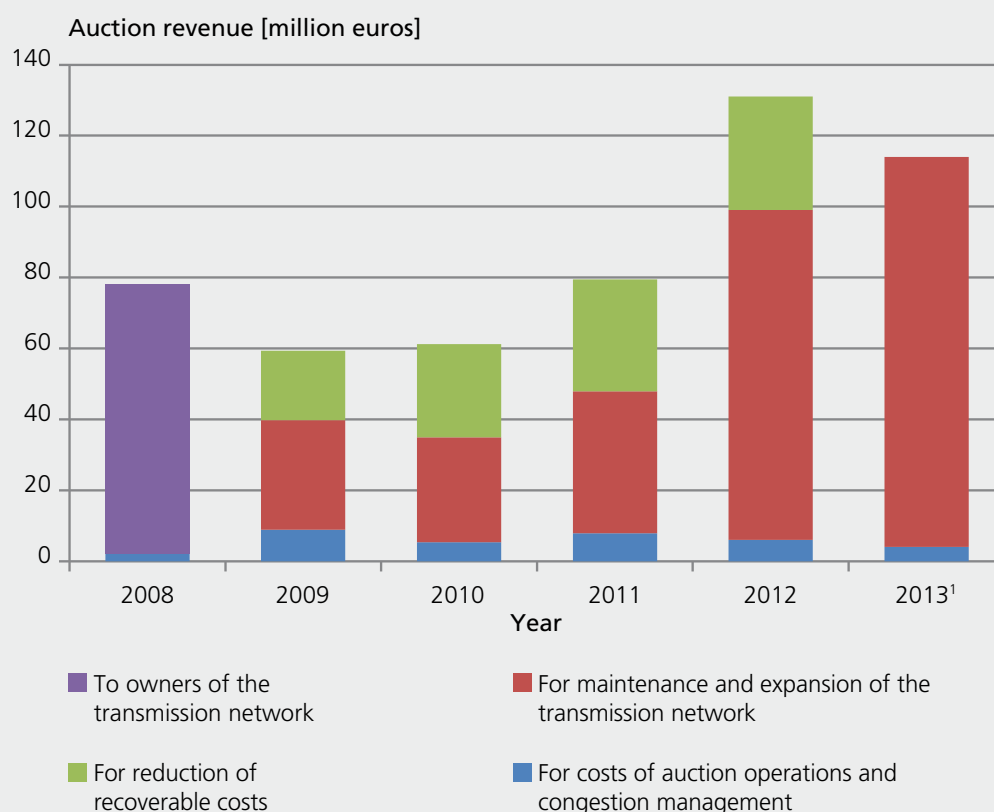


Figure 12: Total auction proceeds generated at Switzerland's borders and their allocation in accordance with the applicable legislation

6.5 International bodies

- » European Union: ElCom supported the efforts aimed at finding solutions in connection with the conclusion of a bilateral electricity agreement between Switzerland and the EU. This specifically concerns the question of long-term supply agreements between Switzerland and France.
- » Agency for the Cooperation of Energy Regulators (ACER): ElCom's official participation depends on the conclusion of an electricity agreement between Switzerland and the EU. However, ElCom participated in certain activities relating to market coupling at the European level and the influence of auction zones and loop flows. It also helped ensure that the studies carried out by ACER on the integration of wholesale energy markets also encompassed Switzerland in its second supervisory report (cf. ACER/CEER: Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012). One of the findings of this report is that there is room for improvement with regard to the management of the transmission network capacity at Switzerland's borders.
- » Council of European Energy Regulators (CEER): ElCom attended several general assemblies as an observer and contributed towards the updating of the 2011 report on quality of electricity supply, which notes that the level in Switzerland is good in an international comparison. With respect to the development of the European energy market, the CEER is pursuing a strategy that places a strong emphasis on the interests of consumers.
- » International Confederation of Energy Regulators (ICER): ElCom became a member of this body at the end of November 2013, with effect from January 2014. The ICER is campaigning for intensified cooperation between energy regulators from all over the world and its efforts are actively supported by the CEER.

6.6 International legal developments

In the year under review, the EU pushed ahead with the implementation of the third stage of the energy market liberalisation that entered into force in 2011. It is also making progress with the drafting of the network codes that will be binding throughout Europe. In this connection, the European Network of Transmission System Operators for Electricity (ENTSO-E), of which Switzerland is also a member, has been entrusted with the mandate of formulating the codes in accordance with the criteria of the European Agency for Cooperation of Energy Regulators (ACER) and submitting them to the latter and subsequently to the EU Commission for implementation (comitology procedure). In the year under review, the draft of the “Capacity Allocation and Congestion Management” network code, which is the central code for international electricity

trading, was adopted via this procedure. Although these network codes are not legally binding for Switzerland, their application is nonetheless decisive for the participation of Swiss players on the European internal electricity market. In view of this, ElCom actively monitored and analysed their drafting.

Legal developments in the international environment indicate that capacity markets are likely to establish themselves. This would mean that the existing electricity trading commodity, i.e. energy in MWh, would be supplemented by a second commodity, namely electrical output in MW. ElCom is keeping a very close eye on developments in this area, because capacity markets will have a significant influence on Switzerland’s electricity industry and consumers, as well as on supply security.

7 About ElCom



ElCom, from left to right: Carlo Schmid-Sutter (President), Aline Clerc, Brigitta Kratz (Vice President), Hans Jörg Schötzau (Vice President), Anne d'Arcy, Werner Geiger, Matthias Finger

7.1 Duties

ElCom is responsible for monitoring the Swiss electricity market and securing compliance with the Swiss Federal Electricity Supply Act. As an independent state regulator, ElCom has an active role to play in the transition from a monopolistic electricity supply system to a competition-based electricity market. Here, one of its duties is to monitor the electricity tariffs for end consumers with basic supply. It also has to ensure that the network infrastructure is properly maintained and is expanded as required so that the future supply can be guaranteed.

ElCom has been entrusted with wide-ranging competencies in order to enable it to fulfil these duties:

- » It supervises electricity tariffs for fixed end consumers (households and other end users with an annual consumption below 100 MWh) and end consumers who do not choose to gain access to the network.

It also examines network use remuneration and may prohibit unjustified electricity price increases, or if tariffs are too high, it is empowered to order price reductions. It may take steps in response to complaints or requests, or on its own initiative in its official capacity as regulator. With respect to tariffs, ElCom may only intervene in the event of violations of legal provisions and is not authorised to intervene in the exercise of discretion on the part of the network operators. Additional supervision of tariffs at the cantonal level is not permissible under the law.

- » ElCom rules on disputes associated with free access to the electricity network. With effect from 1 January 2009, large-scale consumers (i.e. those with an annual consumption of at least 100 MWh) have been able to freely choose their electricity supplier. Consumers with an annual consumption below 100 MWh will probably only be able

to gain free access to the electricity market from 2016, providing that full liberalisation is not rejected by the electorate in a referendum.

- » ElCom is empowered to rule on disputes relating to remuneration at cost for feed-in to the grid, which was introduced on 1 January 2009 for producers of electricity from renewable energy sources.
- » ElCom monitors electricity supply security and the status of the electricity networks.

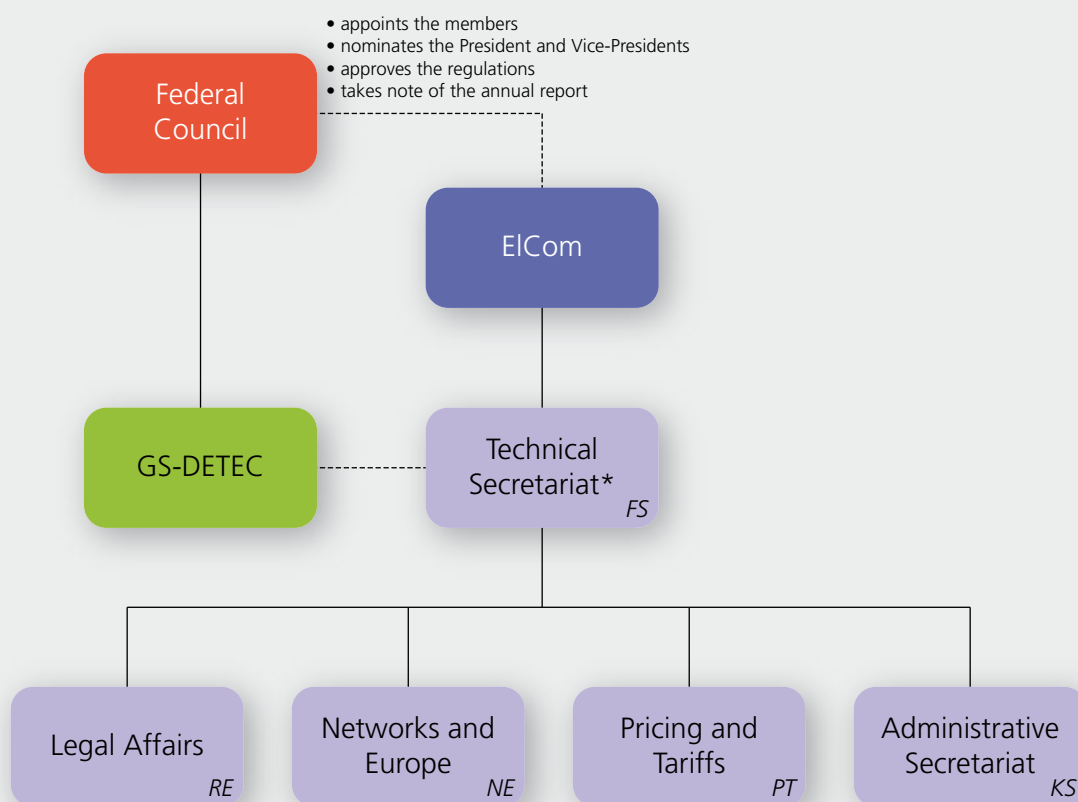
» ElCom defines the procedures for the allocation of network capacities in the event of shortfalls in cross-border transmission lines and coordinates its activities with European electricity market regulators.

» ElCom comprehensively supervises the national operator, Swissgrid AG, now that the latter has assumed the ownership of the transmission network (separation process).

7.2 Organisation and personnel

ElCom comprises seven independent members appointed by the Federal Council, plus a Technical Secretariat. It is not subject to any

directives of the Federal Council and is independent of the administrative authorities.



*Administrative affiliation with the general secretariat of DETEC

Figure 13: Structure of ElCom

7.2.1 The Electricity Commission

At the end of 2011, the Federal Council confirmed the seven existing members of the Electricity Commission for the 2012 to 2015 legislative period. All of them are independent of the electricity industry, and they all act on a part-time basis. On average, the Commission holds a plenary meeting once a month, and its members also attend meetings of the four committees: "Prices and Tariffs", "Networks and Supply Security", "Legal Issues", and "International Relations".

In the year under review, the composition of ElCom was as follows:

President:

- » Carlo Schmid-Sutter, attorney-at-law and notary public, president of the cantonal executive ("Landammann") of Appenzell Innerrhoden until the end of April 2013.

Vice Presidents:

- » Brigitta Kratz, attorney-at-law, tutor in private law at the University of St Gallen.
- » Hans Jörg Schötzau, PhD in natural sciences, titular professor at the Swiss Federal Institute of Technology, Zurich, former CEO of NOK (Networks, Trading, Sales).

Members:

- » Anne d'Arcy, Professor of Corporate Governance and Management Control, Vienna University of Economics and Business.
- » Aline Clerc, degree in engineering from the Swiss Federal Institute of Technology, Lausanne, specialist in rural and environmental engineering, expert at the Consumers' Association of Suisse Romande (FRC) in Lausanne.
- » Matthias Finger, PhD in political science, Professor of Management of Network Industries at the Swiss Federal Institute of Technology, Lausanne.
- » Werner Geiger, degree in engineering from the Swiss Federal Institute of Technology, Zurich, independent business consultant.

Resignations and new appointments

In May 2013, Hans Jörg Schötzau and Werner Geiger stepped down as members of ElCom with effect from the end of the year. In November 2013, the Federal Council appointed Antonio Taormina as Vice President and Christian Brunner as member of ElCom and both are active since the beginning of 2014. Antonio Taormina was a member of the management board of Alpiq until 2011 and in this capacity was in charge of the Energy Western Europe division and responsible for international electricity trading, as well as for production and sales. He thus brings experience in international activities that are gaining in importance for ElCom. Christian Brunner was manager of Alpiq Networks business unit and possesses comprehensive expertise in the area of technical aspects relating to network safety and expansion.

7.2.2 Technical Secretariat

The Technical Secretariat provides the Commission with technical and specialised support, prepares its decisions and implements them. It conducts administrative proceedings and carries out the necessary clarifications. It is independent of any other authorities and is solely subject to the directives of ElCom. The Technical Secretariat is affiliated with the General Secretariat of the Department of the Environment, Transport, Energy and Communications (DETEC). In the year under review, the number of employees of the Technical Secretariat (36) increased by 1 following the employment of an IT project manager.

Head of the Technical Secretariat

» Renato Tami, attorney-at-law and notary public

Pricing and Tariffs (10 employees)

» Stefan Burri, Dr. rer. pol.

Legal Affairs (8 employees)

» Nicole Zeller, attorney-at-law

Networks and Europe (8 employees)

» Michael Bhend, engineer (Federal Institute of Technology, Zurich)

Administrative Secretariat (7 employees)

» Dario Ballanti (Federal Institute of Technology, Zurich)

Senior IT Project Manager

» Stefano Camozzi, business information technology specialist (University of Zurich)

ElCom mission statement

Our vision

- » We want to create a favourable environment in Switzerland for a secure and competitive electricity supply.
- » We ensure the prerequisites for legal, investment and supply security through sound decision-making, high reliability and open communication.
- » We are valued and respected both at home and abroad as a highly competent supervisory authority.

Our mission

- » As an independent supervisory authority, we make sure that the supply of electricity in Switzerland is secure and functions economically.
- » We actively support the efforts of market participants to comply with the applicable legislation and we apply consistent principles when ruling on disputes.
- » Our motto is "As much individual responsibility as possible, as many regulations as necessary".

Our guiding principles

- » We act as a reliable authority for all market players in connection with the implementation of the Electricity Supply Act, and we respond flexibly to technological developments and economic changes.
- » Through our decisions we create the prerequisites for ensuring that Switzerland's electricity supply remains secure, efficient and sustainable.
- » In disputes we mediate between the involved parties and make sure that any decisions we take are communicated clearly and promptly.
- » We support Swiss players in their efforts to participate in the international electricity market, though we also have to make sure that the country's electricity supply is permanently secured.

- » We act with due discretion and always communicate openly and comprehensibly.
- » We promote a regular exchange of experience and know-how with the relevant players at home and abroad and thus optimise our network, our efficiency and the quality of our work.

Code of behaviour for the Technical Secretariat

ElCom's Technical Secretariat is a team of conscientious and committed personnel who:

- » Treat one another with due respect
- » Focus on the essentials
- » Are open to innovative solutions
- » Can be contacted unbureaucratically by the entities under its supervision
- » Adopt a forward-looking approach and work together as a team
- » Use their scope for action in careful consideration of associated risks
- » Place their expertise at the disposal of the general public, politicians and the business sector.

7.3 Finance

In the year under review, ElCom had a budget of 8.2 million Swiss francs at its disposal. Its effective expenditure amounted to 7.6 million Swiss francs, which covered its entire personnel and operating costs.

On the income side, ElCom received a total of 4.3 million Swiss francs. The main sources were payments of supervisory fees by Swissgrid for ElCom's cooperation with foreign authorities and court costs paid by parties involved in legal proceedings.

7.4 Events

7.4.1 ElCom 2013 Forum

The fourth ElCom Forum was held on 25 November 2013 at the Swiss Museum of Transport, Lucerne. The impending challenges associated with the changing energy environment were discussed under the heading of "Network expansion in the framework of the new energy strategy". The increase in the use of renewable energy that is planned as part of "Energy Strategy 2050" represents major new challenges for the electricity supply networks and will require enormous investments. It will only be possible to transport and distribute the increasing quantity of irregularly occurring production from renewable energy sources if a comprehensive electricity network is available. The restructuring of Switzerland's electricity supply system will be a challenge for all players in the industry and can only be

successfully implemented if there is a wide degree of acceptance. In view of this, the participants at the ElCom Forum set out to identify those challenges that arise in connection with the efficient and safe expansion of the electricity network within the framework of the new energy strategy. Federal Councillor Doris Leuthard (Minister of Energy) and Jochen Homann, President of the German Federal Network Agency, attended the Forum and presented their views and ideas to the 300 representatives of the electricity industry who attended the Forum, together with a variety of other participants. ElCom used a number of practical examples to illustrate its role as a credible, competent and reliable supervisory authority.

The next ElCom Forum will be held in Biel on Friday, 14 November 2014.

7.4.2 Information events for network operators

In the year under review, ElCom organised 9 information events at various locations in Switzerland on topics such as network costs, increases in network capacity and legal issues. In addition, the Swiss Federal Office of Energy (SFOE) provided information concerning the future development of Switzerland's

energy policy. A total of around 600 people attended these events, which were offered on a non-profit basis and provided a welcome opportunity for the participants, as well as the involved ElCom and SFOE personnel, for exchanging professional views and experiences.

8 Appendix

8.1 Facts and figures for 2013

Types of cases	Brought forward from previous years	Received in 2013	Dealt with in 2013	Carried forward to 2014
Specific matters relating to tariffs	73	186	112	147
Feed-in remuneration at cost	17	68	25	60
Other cases	136	312	119	329
Total	226	566	256	536

Table 7: ECom activities, statistics for 2013

8.2 Appeal statistics

	No appeal	Appeals to Fed. Admin. Court	Appeals to Fed. Supr. Court
249 rulings 2008-2013	204	45	13

Table 8: Rulings pronounced between 2008 and 2013

8.3 Meetings

The members of ECom hold discussions at monthly plenary meetings. In addition, the four committees hold their own meetings and ECom also organises workshops and oth-

er extraordinary meetings. In the year under review, the members of ECom – in various compositions – attended a total of 14 full-day and 28 half-day meetings within Switzerland.

8.4 Publications

(Note: None of the publications listed in chapter 8.4. are available in English)

Rulings

12.12.2013	Vergütung Netzverstärkung PV-Anlage [...] in 8890 Flums
12.12.2013	Vergütung Netzverstärkung PV-Anlage [...] in 4206 Seewen
12.12.2013	Vergütung Netzverstärkung Photovoltaikanlage
12.12.2013	Vergütung Netzverstärkung PV-Anlage [...] in 9402 Mörschwil
12.12.2013	Vergütung Netzverstärkung Photovoltaikanlage
12.12.2013	Wiedererwägung SDL-Kostentragungspflicht 2009 für nicht beschwerdeführende Kraftwerke
12.12.2013	Wiedererwägung Nachbelastung SDL 2009
12.12.2013	Verzinsung SDL 2010
12.12.2013	Anschluss von zwei PV-Anlagen der BZA AG ans Verteilnetz der Energie Kestenholz, Gesuch um Erlass einer vorsorglichen Massnahme
12.12.2013	Vergütung Netzverstärkung PV-Anlagen [...] in 8816 Hirzel
12.12.2013	Vergütung Netzverstärkung Kleinwasserkraftwerk [...], Flims
12.12.2013	Vergütung Netzverstärkung PV-Anlage [...] in 6403 Küssnacht am Rigi
12.12.2013	Vergütung Netzverstärkung PV-Anlage [...] in 3148 Lanzenhäusern
12.12.2013	Vergütung Netzverstärkung PV-Anlage [...] in 3663 Gurzelen
12.12.2013	Vergütung Netzverstärkung PV-Anlagen [...] in 3317 Limpach
12.12.2013	Gesuch um Gewährung des Netzzugangs und Zurverfügungstellung der für die Abrechnung der Stromlieferung notwendigen Messdaten und Informationen für Consorzio Comestei / vorsorgliche Massnahmen
12.12.2013	Gesuch um Gewährung des Netzzugangs und Zurverfügungstellung der für die Abrechnung der Stromlieferung notwendigen Messdaten und Informationen für Consorzio Lotto 814 / vorsorgliche Massnahmen

28.11.2013	Kostentragungspflicht für ITC-Mindererlöse in den Jahren 2010, 2011 und 2012
14.11.2013	Verzinsung SDL 2009/2010
14.11.2013	Verzinsung SDL 2009/2010
14.11.2013	Verzinsung SDL 2009/2010
14.11.2013	Verzinsung SDL 2009/2010
14.11.2013	Verzinsung SDL 2009/2010
14.11.2013	Verzinsung SDL 2010
14.11.2013	Vergütung Netzverstärkung PV-Anlage [...] in 6206 Neukirch
14.11.2013	Vergütung Netzverstärkung PV-Anlagen [...] in 7417 Paspels
14.11.2013	Vergütung Netzverstärkung PV-Anlage [...] in 6010 Kriens
14.11.2013	Vergütung Netzverstärkung PV-Anlage [...] in 3434 Obergoldbach
14.11.2013	Vergütung Netzverstärkung PV-Anlage [...] in 2916 Fahy
14.11.2013	Vergütung Netzverstärkung PV-Anlage [...] in 9608 Gantereschwil
14.11.2013	Antrag auf Netzzugang per 1.1.2013 / Abschreibung Verfahren
14.11.2013	Rückerstattung des Zuschlags auf die Übertragungskosten / Bescheid des BFE vom 31. August 2012 zum Antrag Nr. 19
17.10.2013	Vergütung Netzverstärkung PV-Anlage [...] in 8370 Sirnach
17.10.2013	Vergütung Netzverstärkung PV-Anlage [...] in 9043 Trogen
17.10.2013	Vergütung Netzverstärkung PV-Anlage [...] in 8500 Frauenfeld
17.10.2013	Vergütung Netzverstärkung PV-Anlage [...] in 3538 Röthenbach
17.10.2013	Vergütung Netzverstärkung PV-Anlage [...] in 6036 Dierikon

17.10.2013	Weitergehende Netzverstärkung im Zusammenhang mit der PV-Anlage [...] in 3267 Seedorf
17.10.2013	Teilweise Wiedererwägung der Verfügung vom 11.11.2010 betreffend Kosten und Tarife 2011 für die Netznutzung Netzebene 1 und Systemdienstleistungen
17.10.2013	Deckungsdifferenzen des Jahres 2012 / Sistierung des Verfahrens
17.10.2013	L'accès au réseau (y c. question de la représentation et de l'unité économique)
19.09.2013	Netznutzungstarif für nicht ganzjährig genutzte Liegenschaften (Art. 18 Abs. 2 StromVV)
19.09.2013	L'accès au réseau
19.09.2013	Vergütung Netzverstärkung Photovoltaikanlage
19.09.2013	Vergütung Netzverstärkung Photovoltaikanlage
19.09.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.08.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.08.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.08.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.08.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.08.2013	Teilweise Wiedererwägung der Verfügung vom 11. November 2010 betreffend Definition und Abgrenzung Übertragungsnetz
15.08.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.08.2013	Vergütung Netzverstärkung Photovoltaikanlage
04.07.2013	Vergütung Netzverstärkung Photovoltaikanlage
04.07.2013	Vergütung Netzverstärkung Photovoltaikanlage
04.07.2013	Vergütung Netzverstärkung Photovoltaikanlage
04.07.2013	Vergütung Netzverstärkung Photovoltaikanlage
04.07.2013	Vergütung Netzverstärkung Photovoltaikanlage
13.06.2013	Vergütung Netzverstärkung PV-Anlage [...] in 8906 Bonstetten

13.06.2013	Vergütung Netzverstärkung PV-Anlage [...] in 3076 Worb
13.06.2013	Weitergehende Netzverstärkung im Zusammenhang mit der Erweiterung von drei PV-Anlagen [...] in 3267 Seedorf
03.06.2013	Überführung Übertragungsnetz ewz
13.05.2013	Deckungsdifferenzen des Jahres 2011 / Sistierung des Verfahrens
13.05.2013	Vergütung Netzverstärkung Photovoltaikanlage
13.05.2013	Vergütung Netzverstärkung Photovoltaikanlage
13.05.2013	Rückerstattung SDL
13.05.2013	Vergütung Netzverstärkung Photovoltaikanlage
13.05.2013	Vergütung Netzverstärkung Photovoltaikanlage
13.05.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.04.2013	Trasmissione del calcolo dei costi (contabilità analitica) per le tariffe 2013 (versione light) e del conto annuale per il 2011
15.04.2013	Überprüfung der anrechenbaren Energiekosten für das Geschäftsjahr 2008/09
15.04.2013	Kosten und Tarife 2009 für die Netznutzung Netzebene 1 und Systemdienstleistungen / Neufestsetzung anrechenbare Kosten
15.04.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.04.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.04.2013	Vergütung Netzverstärkung Photovoltaikanlage
15.04.2013	Vergütung Netzverstärkung Photovoltaikanlage
11.03.2013	Vergütung Netzverstärkung Photovoltaikanlage
11.03.2013	Vergütung Netzverstärkung Photovoltaikanlage
11.03.2013	Vergütung Netzverstärkung Photovoltaikanlage
14.02.2013	Vorsorgliche Verfügung des Netzzugangs
14.02.2013	Accès au réseau; mesures provisionnelles

14.02.2013	Vergütung Netzverstärkung Photovoltaikanlage
14.02.2013	Vergütung Netzverstärkung Photovoltaikanlage
14.02.2013	Vergütung Netzverstärkung Photovoltaikanlage
18.01.2013	Einreichung des Tarifblatts 2013
18.01.2013	Einreichung des Tariffformulars 2013
18.01.2013	Einreichung der Kostenrechnung für die Tarife 2013 und der Jahresrechnung 2011
18.01.2013	Einreichung der Kostenrechnung für die Tarife 2013 und der Jahresrechnung 2011
18.01.2013	Einreichung der Jahresrechnung 2011 und des Tarifblatts 2013
18.01.2013	Einreichung der Jahresrechnung 2011
18.01.2013	Vergütung Netzverstärkung Photovoltaikanlage
18.01.2013	Vergütung Netzverstärkung Photovoltaikanlage
18.01.2013	Vergütung Netzverstärkung Photovoltaikanlage

Directives

14.11.2013	1/2013 - Pflicht der Netzbetreiber zur Erfassung und Einreichung der Daten über die Versorgungsqualität im Jahr 2014
------------	--

Notifications

20.12.2013	Gesuch um Gewährung des Netzzugangs und Zurverfügungstellung der für die Abrechnung der Stromlieferung notwendigen Messdaten und Informationen für Truninger AG / vorsorgliche Massnahmen
28.11.2013	Accès au réseau et dissociation de site
17.10.2013	Examen des tarifs de l'électricité de l'ESR
25.09.2013	Rückerstattung der SDL-Kosten aufgrund der Aufhebung des Kraftwerkstarifs, Brief an Kraftwerksbetreiber
25.09.2013	Rückerstattung der SDL-Kosten aufgrund der Aufhebung des Kraftwerkstarifs, Brief an Netzbetreiber

09.09.2013	Überprüfung der Netznutzungstarife und -entgelte sowie der Elektrizitätstarife der IWB - Abschluss schreiben zu den anrechenbaren Kapitalkosten
05.09.2013	Fragen und Antworten: Netzzugang und Lieferantenwechsel (Markteintritt)
26.03.2013	Entwicklung der Wechselrate im Strommarkt
12.03.2013	Anrechenbarkeit an die Netzkosten bei Übernahme von Verlegungskosten in Abweichung von Art. 742 ZGB
06.02.2013	Abschluss schreiben Konsultation Strombörse / Zusammenfassung Auswertung Konsultation Strombörse

Newsletters

29.11.2013	Newsletter 04/2013
26.08.2013	Newsletter 03/2013
01.07.2013	Newsletter 02/2013
27.03.2013	Newsletter 01/2013

Press releases

25.11.2013	Der Schweizer Strommarkt beginnt zu spielen
06.11.2013	Bundesrat wählt neue Mitglieder für die Eidgenössische Elektrizitätskommission
31.10.2013	ElCom gibt grünes Licht für Kooperationsvereinbarung zwischen Swissgrid und EPEX Spot
06.09.2013	Strompreise 2014: Im Durchschnitt leicht steigende Tarife für Haushalte, keine Veränderung für mittlere Betriebe
13.06.2013	Tätigkeitsbericht 2012 der ElCom und künftige Herausforderungen
14.05.2013	Rücktritt von zwei Mitgliedern der ElCom

8.5 Glossary

Balance energy	Electricity that is billed in order to balance the difference between the effective quantity purchased or supplied to a balance group and the quantity purchased or supplied in accordance with the timetable.
Balance group	Formal grouping of participants in the electricity market for the purpose of forming a common measurement and billing unit within control zone Switzerland towards the national network operator.
Balance management	Measures for constantly maintaining the electricity and capacity balance in the electricity system. It includes timetable management, data measurement and balance compensation management.
Congestion management	Ensures the security of supply through preventive (e.g. net transfer capacity [NTC], capacity auctions) and operational (e.g. re-dispatch, reductions) measures.
Control zone	Zone in which the national network operator is responsible for network control. This zone is physically defined via measurement stations.
Day-ahead trading	Trading of energy on the day prior to its effective delivery or purchase.
Distribution network	High, medium or low voltage network for the purpose of supplying electricity to end consumers or electricity supply companies.
End consumers	Clients who purchase electricity for their own consumption. This does not include power plants that buy electricity for their own consumption and for powering pumps in pump storage power plants.
Inter TSO compensation	Compensation mechanism applied between participating transmission system operators (TSOs) for the network utilisation costs associated with cross-border supplies of electricity.
Intraday trading	In intraday trading, short-term transactions are carried out after closure of day-ahead trading in order, for example, to be able to react to deviations of the load from the anticipated volume, or to shutdowns of power plant units, and thus to reduce the deviation from the scheduled load.
Net transfer capacity (NTC)	Maximum exchange programme between two network zones which is reconcilable with the safety standards of both zones and takes account of the technical uncertainties of future capacity situations.
Network access	Right to use a network in order to obtain electricity from any supplier or to feed electricity into a network.

Network use	Physical use of a network system on the basis of the input or withdrawal of electricity.
Reserve power supply	Power supply that can be drawn on automatically or manually by power plants to maintain the scheduled level of electricity exchange and ensure the continued safe operation of the network.
SAIDI	SAIDI stands for System Average Interruption Duration Index, which indicates the average duration of interruption for an end consumer in an electricity supply system.
SAIFI	SAIFI stands for System Average Interruption Frequency Index, which indicates the average frequency of interruption for an end consumer in an electricity supply system.
System services	Auxiliary services required for the safe operation of networks. These include in particular: system coordination, balance management, holding of reserve capacity, self-contained start-up and independent operation capability of generators, maintenance of voltage level (including idle component), operational measurement and compensation of active current losses.
Transmission network	Network used for the transmission of electricity over large distances within the country and for connection to networks outside the country, usually operated at the 220 to 380 kV level. The following items in particular are integral parts of the transmission network: a) Supply lines, including support structures; b) Coupling transformers, switching systems, measurement, control and communication equipment; c) Installations that are operated together with other network levels and are mostly used in connection with the transmission network, without which it would not be possible to operate the latter safely and efficiently; d) Switching fields located before the transformer at the point of transition to another network level or to a power plant.
WACC	WACC stands for Weighted Average Cost of Capital. Network use remuneration is a major electricity price component and comprises operating costs and capital costs. For the capital that is invested in the existing electricity networks, or is to be invested in new electricity networks, the investors are entitled to receive interest. This is specified with the aid of a calculatory mechanism, namely WACC.

8.6 List of abbreviations, tables and illustrations

Abbreviations

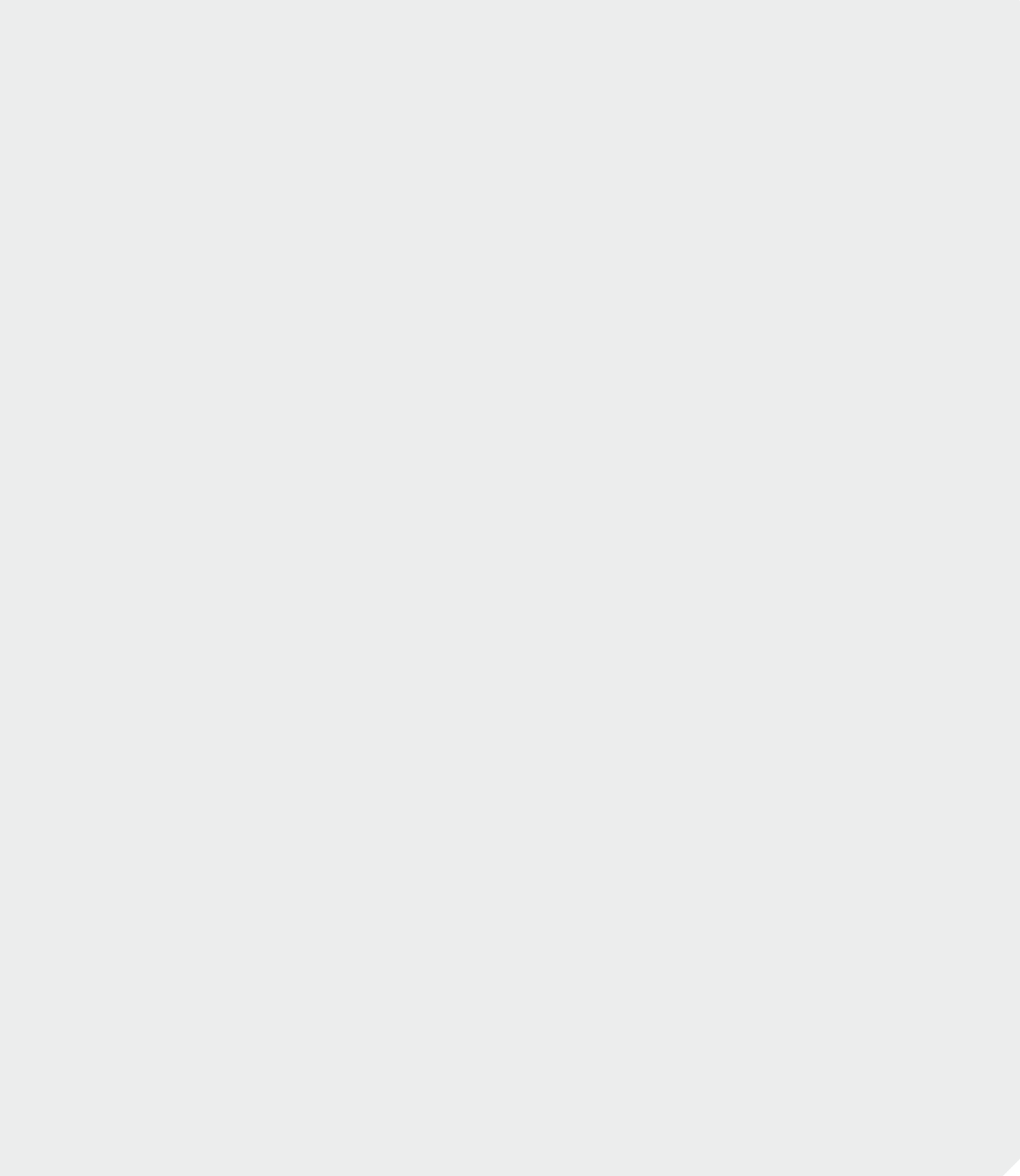
ACER	Agency for the Cooperation of Energy Regulators
CEER	Council of European Energy Regulators
ElCom	Swiss Federal Electricity Commission
ENTSO-E	European Network of Transmission System Operators for Electricity
EU	European Union
ICER	International Confederation of Energy Regulators
ITC	Inter TSO compensation
LTC	Long-term contract
NTC	Net transfer capacity
REMIT	EU Regulation on Wholesale Energy Market Integrity and Transparency
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
TSO	Transmission system operator
WACC	Weighted Average Cost of Capital

Tables

Table 1	Installations in the Swiss electricity network
Table 2	Figures relating to rulings on network capacity increases (status: 31.12.2013)
Table 3	Number of rulings on network capacity increases (status: 31.12.2013)
Table 4	SAIDI and SAIFI figures for 2010, 2011 and 2012
Table 5	Trend in import capacity (NTC)
Table 6	Trend in export capacity to Italy (NTC)
Table 7	ElCom activities, statistics for 2013
Table 8	Rulings pronounced between 2008 and 2013

Illustrations

Figure 1	Proportional holdings in the distribution network by company size
Figure 2	Proportion of network utilisation revenue by company size
Figure 3	Breakdown of network costs
Figure 4	Trend in investments and write-offs in the distribution network
Figure 5	Price trend in the highest-priced 20 MW allocated secondary reserve energy
Figure 6	Transfer to free market
Figure 7	Proportion of energy supplies via the distribution network by company size
Figure 8	Cost components of the overall electricity price for consumer profile H4 (excluding value-added tax)
Figure 9	Comparison of average cantonal costs for network use for consumer profile H4 in 2009 and 2014
Figure 10	Comparison of average cantonal costs for energy for consumer profile H4 in 2009 and 2014
Figure 11	Comparison of average cantonal costs for fees and payments to the state for consumer profile H4 in 2009 and 2014
Figure 12	Total auction proceeds generated at Switzerland's borders and their allocation in accordance with the applicable legislation
Figure 13	Structure of ElCom





Swiss Federal Electricity Commission ElCom
Effingerstrasse 39, CH-3003 Bern
Phone +41 58 462 58 33, Fax +41 58 462 02 22
info@elcom.admin.ch · www.elcom.admin.ch