

General Balance Group Regulations

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Contents of the General Balance Group Regulations

The General Balance Group Regulations regulate the establishment and management of a balance group as well as the handling of schedule messages of the BGM and the limitations relating thereto. They also specify the procedures for dealing with schedule differences and the monitoring of compliance with capacity rights. Finally, they contain provisions relating to the settlement of balance energy and determine the remuneration and payment conditions for services provided or to be provided between Swissgrid and the BGM within the context of the Balance Group Contract.

The technical requirements and procedures applicable to the balance groups are contained in the Technical Balance Group Regulations, which likewise form part of the Balance Group Contract.

1 Establishing a balance group

1.1 Requirements for establishing a balance group

To initiate a registration process within the meaning of Clause 3.1 of the Balance Group Contract, the following requirements must be met cumulatively and in full by the applicant in addition to the information listed therein. The contact of the BGM in the registration process is the Swissgrid contact office for general queries:

- a. submission of the signed application form, completed in full and correctly by a person who has representation authority;
- b. presentation of legally valid proof of the applicant's status as a legal entity (generally by means of a registry extract or comparable proof in German or English); for foreign BGMs Swissgrid is entitled to set the requirements individually;
- c. provision of suitable collateral at the request of Swissgrid (as per Clause 2.4);
- d. payment of registration fee of € 6,250;
- e. assurance of the applicant's availability and capacity to act during the schedule coordination period, as described below in Clause 1.3;
- f. for handling the cost-covering remuneration for feed-in to the electricity grid, the BGM with feed-in and feed-out in Switzerland has to provide separate estimates of feed-outs (end consumers) of the balance group for the two quarters following the expected activation [MWh per quarter]. This notification has to be made on the application form. If, after filling in the application form, the activation date is delayed, it may be necessary to adjust this estimate;
- g. assurance from the BGM's bank that it has set up a SEPA direct debit mandate (Single Euro Payments Area Direct Debit Business-to-Business Mandate, «SEPA DD B2B») with Swissgrid. The SEPA DD B2B form (one copy for Swissgrid, one copy for the bank) published on the Swissgrid website (www.swissgrid.ch) must be completed in this respect. By way of exception and only by agreement with Swissgrid, BGMs whose bank do not support SEPA DD B2B in Switzerland can also use the direct debit (direct debit authorisation) method. The direct debit form published on the Swissgrid website (www.swissgrid.ch) must be completed in this respect;
- h. confirmation of the plausibility values sent by Swissgrid for consumption and production for BGMs with metering points (as defined by Clause 2.1).
- i. If an applicant intends to make deliveries of electrical energy between the Swiss control area and the French control area (external trade), it must inform Swissgrid in the application form.
- j. If an applicant intends to make deliveries of electrical energy between the Swiss control area and French control area in the context of participation in the French balancing market, it

must also provide proof that it has access to production or consumption capacities in the Swiss control area for control energy use or reserve supplies, and ensures their use at short notice.

Once the applicant has submitted all the above documents to Swissgrid and met all the requirements specified in 3.1 of the Balance Group Contract, Swissgrid will check them within ten working days after receipt of the application and inform the applicant of any shortcomings. Incomplete or incorrectly completed documents may be corrected by the applicant within a period of 30 days after being requested to do so by Swissgrid. By submitting the application, the applicant undertakes to automatically pay the registration fee. If the registration fee is not paid, the registration of the balance group in question will not be completed. In such an event, the registration fee will still be payable.

Before the balance group is activated, Swissgrid will perform a trial run with the applicant. Further information about the trial run can be found in the Technical Balance Group Regulations.

The registration process should have been completed within a period of six months at the latest following receipt of the application form. If the registration process could not be completed within six months due to missing details not provided by the applicant, the applicant is called upon to provide Swissgrid with a binding date for the submission of all required details and documents as well as the completion of the tests. Failing this, Swissgrid will return all previously submitted documents to the applicant and end the registration process. If another application is submitted following this, the registration fee will need to be paid again.

1.2 Activation of a balance group

To activate a balance group the following conditions must be satisfied:

- Fulfilment of all the requirements specified in Clause 1.1
- Credit of the registration fee pursuant to Clause 1.1
- Receipt of the collateral by Swissgrid
- Submission of the plausibility values within the meaning of Clause 2.1
- Successful completion of the trial run
- Confirmation by the BGM's bank that the SEPA direct debit mandate pursuant to Clause 1.1 has been set up

Once these conditions have been satisfied, Swissgrid returns a countersigned copy of the Balance Group Contract to the applicant and activates the balance group of the applicant, or of the now BGM, on the binding activation date agreed. Balance groups are always activated on the first calendar day of the month.

1.3 Contact offices

The BGM must provide details of the following contact offices on the application form and keep them updated. The contacts must meet the following requirements:

- The contact office for **general queries** must be available during normal office hours and be able to respond to queries made by Swissgrid within two working days of receipt.

- The contact office for **financial queries** must be available during normal office hours and be able to respond to requests from Swissgrid relating to billing and payment terms within two working days of receipt.
- The contact office for **operational queries** must be available by phone, e-mail and fax and be ready to take action during the agreement time for schedules submitted by the BGM within 30 minutes of receipt of the positive Intermediate Confirmation Report (ICNF), so as to be able to provide corrected schedules due to schedule differences or to subsequently respond to the application of the schedule difference rules. In particular, the contact office must be available and ready to take action as long as the balance group has open intraday positions. The languages of communication are German and English. In the event of a fault in or failure of its means of communication, the BGM must notify Swissgrid (or vice versa) without delay to agree on alternative means of communication and/or coordinate subsequent action.

- The BGM shall ensure that a contact office is set up to send the imbalance data for balance energy volume. This has to be an e-mail address assigned to an organisational unit and not to a particular person. If a third party is authorised, additional contact details of the authorised representative must be supplied.

Swissgrid contact offices:

- The contact office for **operational queries** is available 24 hours a day, 365 days a year. The telephone number and e-mail address will be disclosed to the BGM when the Balance Group Contract is concluded. Phone calls are recorded by Swissgrid. The BGM agrees to the recording being made and to the recordings being used.
- The contact office for **general queries** is available during Swissgrid office hours. The phone numbers and office hours are published on the Swissgrid website (www.swissgrid.ch).

1.4 Changes to the details of the BGM

Swissgrid must be notified of changes to the details of the BGM using the amendments form on the Swissgrid website 10 days before the change occurs. This also applies to changes of telephone numbers or to details relating to end consumption or production, i.e. if a BGM indicated at registration that it would not supply any end customers but now intends to do so in future. In this case, Swissgrid must be informed in advance. Swissgrid shall send the BGM's contact office for general queries a correspondingly adjusted document. The BGM checks the details and returns the signed document by post. Swissgrid provides notification of when the change will take effect.

The reported changes will not take effect until they have been approved by Swissgrid. This means in particular that commencement of a delivery to an end customer that has not previously been performed is only permitted if it has been authorised by Swissgrid.

1.5 Changes to the Swissgrid contact offices

Swissgrid publishes its up-to-date contact details on the Swissgrid website (www.swissgrid.ch). Swissgrid provides e-mail notification of any changes to the contact offices of the BGM.

1.6 Authorisation

For the management of schedule messages and the receipt of imbalance data, the BGM can delegate its responsibilities to an authorised representative provided it is ensured that the rights and obligations from this Balance Group Contract are met. The BGM shall be liable to Swissgrid for the proper execution of the Contract by any authorised representative.

The BGM and the authorised representative must provide Swissgrid with proof of authorisation. It requires a written assurance that the obligations, in particular availability and ability to act in accordance with Clause 1.3, will be fulfilled by the authorised representative. The BGM, however, remains responsible to Swissgrid for ensuring that the obligations are fulfilled. Swissgrid shall provide the BGM and the service provider with a corresponding form that is mandatory and has to be furnished with the legally valid signatures of the BGM and its service provider.

The BGM must enter the contact offices of the authorised representative in the application form.

Existing authorisations will continue to be valid, as far as they fulfil the current requirements of Swissgrid. In case of doubt, Swissgrid will require a new authorisation.

2 Consumption forecast, limitation and collateral

According to Clause 4.2 the BGM is obliged to ensure that a zero power balance is essentially maintained. To check compliance with the zero power balance requirement, Swissgrid is entitled to verify the schedule message by the BGM based on the following rules.

In addition, the BGM must comply with the limits assigned to it within the meaning of Clause 2.2 and provide Swissgrid with the appropriate collateral as defined by Clause 2.4.

2.1 Verification of the consumption forecast

2.1.1 Submission of the consumption forecast (CONS)

BGMs with metering points are obliged to send the forecast for their consumption in the Swiss control area (CONS) to Swissgrid.

The consumption forecast (CONS) of the BGM has to be provided according to the guidelines for «LPA/BG₁», as defined in the key documents of the Association of Swiss Electricity Companies (VSE).

In the context of the consumption forecast to be determined, the pump power should be deducted and redispatch and control energy should not be included. The BGM may deviate from the specified definition by up to a maximum of 20% of the daily consumption volume in justified exceptional cases and following confirmation from Swissgrid.

The guidelines for sending the consumption forecast and the relevant technical requirements are dealt with in the Technical Balance Group Regulations.

Swissgrid validates the consumption forecast (CONS) on the basis of plausibility values and applies the limits according to Clause 2.2.2.

2.1.2 Calculating the plausibility values

The plausibility values are based either

- a. on empirical production and consumption values from the last twelve months (load profile aggregate and input profile total) or
- b. from a plausible estimate: balance groups for which Swissgrid has so far not received any historical load profile aggregate and input profile total values prepare a plausible estimate of the minimum and maximum feed-in and feed-out values and make these available to Swissgrid as part of the registration and change process without being requested to do so. Swissgrid accepts estimates that have a sufficiently reliable basis. Swissgrid reserves the right to check this estimate cyclically based on the metering data and to make adjustments if necessary, about which the BGM will be informed in advance.

Provided they are entitled to do so, pump and power plant shares of balance groups will be considered in the plausibility values $PROD_{Min}$ and $PROD_{Max}$. Long term energy supply contracts

¹ Load profile aggregate / balance group

in particular will not be considered as pump and power plant shares. The BGM has an obligation towards Swissgrid to provide it with a legally valid proof of the pump or power plant share that justifies the set-off. Corresponding pump and power plant shares must be confirmed by the power plant operator. A mandatory condition is that the BGM must be able to access the shares at all times and that the shares must be located in the Swiss control area. Furthermore, the BGM must report its own pump capacities to Swissgrid in advance so that the $PROD_{Min}$ can be adjusted.

$$PROD_{Min} = IPT_{Min} - PUMP_{Max} - PU_{Shares}$$

$$PROD_{Max} = IPT_{Max} + PP_{Shares}$$

$$CONS_{Min} = LPA_{Min}$$

$$CONS_{Max} = LPA_{Max}$$

IPT_{Max} & IPT_{Min} = max. and min. value of the input profile total (IPT) of the last twelve months based on quarter hourly values

LPA_{Max} & LPA_{Min} = max. and min. value of the load profile aggregate (LPA) of the last twelve months based on quarter hourly values

PP_{Shares} = power plant shares

PU_{Shares} = pump shares

$PUMP_{Max}$ = own pump capacity

The identified plausibility values are made available to the BGM for cross-checking and must be confirmed. The BGM may apply for an adjustment of the plausibility values provided he can prove why the existing plausibility values will no longer be applicable in the future. Adjusted plausibility values are only valid after they have been expressly confirmed by Swissgrid.

2.1.3 Validation of the schedule registration based on plausibility values

The schedule registration is continuously validated based on the plausibility values $PROD_{Min}$, $PROD_{Max}$, $CONS_{Min}$ and $CONS_{Max}$.

The consumption time series may not exceed $CONS_{Max}$ and not fall below $CONS_{Min}$.

Generally Swissgrid does not inform the BGM if the plausibility values are breached. Swissgrid will only contact the BGM if the values are exceeded to a large extent or repeatedly.

2.2 Limitation of an unbalanced schedule message/restriction of the open position

Within the scope of the schedule messages, Swissgrid shall grant the BGM the right, depending on the following time periods, to submit a limited open position, although it has to be closed at the latest by the intraday cut-off time (COT in the sense of the last possible time for coordinating a schedule/time series that had not yet been matched by the submission deadline).

2.2.1 Definition of open position

To define the term open position, a distinction must be made between balance groups without metering points (without physical feed-in and/or feed-out) and balance groups with metering points (with physical feed-in and/or feed-out).

2.2.1.1 Balance groups without metering points (without physical feed-in and/or feed-out)

An open position is a positive or negative balance from a comparison (in the sense of a summation) of all registered accepted time series from the TPS (trade responsible schedule) schedule document received from the BGM per time interval. If an accepted and not yet matched time series is adjusted by Swissgrid (manual intervention, copy from counterpart schedule time series or application of a market rule), the amended time series applies.

2.2.1.2 Balance groups with metering points (with physical feed-in and/or feed-out)

Swissgrid calculates the open position on the basis of the schedule submission (including CONS time series) and the $PROD_{Min}$ and $PROD_{Max}$ values. If an accepted and not yet matched time series is adjusted by Swissgrid (manual intervention, copy from counterpart schedule time series or application of a market rule), the amended time series applies.

The following types of behaviour will lead to an open position:

- In the TPS schedule document, the BGM submits trading schedules together with the consumption forecast (CONS). If the sum total of all trading schedules together with the consumption forecast per time interval shows a deficit (normal case), this must be covered by production. If the deficit is larger than the $PROD_{Max}$ value, the excess share is regarded as the open position.
- The same applies to a surplus that may result from the sum total of trading schedules and the consumption forecast. This surplus must be covered by negative production/pump power. If the surplus is larger than the $PROD_{Min}$ value, the excess share is regarded as the open position.

Therefore, the following applies:

$$-PROD_{Max} \leq PositionTPS \leq -PROD_{Min}$$

PositionTPS = sum total of all time series from the TPS schedule document received from the BGM per time interval (including CONS).

Positive value = surplus/long

Negative value = deficit/short

The open position arises from the deviation from the described band.

The BGM is also obliged to ensure that the above-mentioned production/pump power matches the production and pump capacity that is actually available.

2.2.2 Limitation of the open position

In the context of limiting the open position, a distinction has to be made between three consecutive phases during which an open position is tolerated up to a quantified value (power in MW). Swissgrid will only take appropriate action, which may extend to suspension within the meaning of Clause 14.1 of the Balance Group Contract, if the BGM has an open position based on its schedule messages that exceeds the predefined tolerance ranges (limits) within the respective phase (limit 1 to 3).

1. **Limit 1 «DA to D-2h»:**

This limit applies to the open position in the respective quarter of an hour after the conclusion of the day-ahead process («DA») and after applying the market rules up to two hours before the physical delivery («D»).

2. **Limit 2 «D-2h to COT ID»:**

This limit applies to the open position in the respective quarter of an hour after two hours before the physical delivery («D») up to the cut-off time («COT») for internal trades in the intraday.

3. **Limit 3 «COT ID and PS»:**

This limit applies to the open position in the respective quarter of an hour after the cut-off time for internal trades in the intraday and after the application of the intraday market rules. For balance groups without metering points, this limit must be adhered to until completion of the Post-Scheduling Adjustment Process. Generally in the limit 3 phase there is an obligation to balance the open position (open position = 0), but an open position is tolerated in some cases, as shown in the diagram 1 below.

Schedule messages of balance groups without metering points may be completely rejected in the Post-Scheduling Adjustment Process if the open position exceeds limit 3 and the open position increases compared with the last schedule message.

Within the scope of the schedule messages in the Post-Scheduling Adjustment Process of balance groups with metering points, Swissgrid checks the plausibility of the change in open position compared with the consumption and the production of the balance group. In case of schedule submissions that are not consistent with the information regarding consumption and production of the balance group, Swissgrid may take suitable action that may extend to suspension of the balance group.

Within the scope of the phases described above, the following threshold values apply:

Limit 1: DA to D-2h [MW]	Limit 2: D-2h to COT ID [MW]	Limit 3: COT ID and PS [MW]	Collateral [EUR]
(long/short)	(long/short)	(long/short)	
10	10	10	100,000
25	10	10	200,000
50	25	10	400,000
100	25	10	550,000
200	50	10	850,000
300	75	10	1,100,000
400	100	10	1,400,000
<i>D = delivery/ time of physical delivery</i> <i>ID = intraday</i> <i>DA = day-ahead</i> <i>PS = post-scheduling</i>		<i>Cut-off time (COT): The last possible time for the coordination of a schedule/time series that had not yet been matched at the submission deadline.</i>	
		<i>Submission deadline: Time until which new business relations are accepted for the corresponding process (gate closing time/GCT). In the internal intraday process, the cut-off time = submission deadline.</i>	

For balance groups without metering points and with pump and/or power plant shares $PROD_{Min}$ and $PROD_{Max}$ will be considered when verifying that Limit 1 and Limit 2 are met. In this way a smooth processing of schedules based on pump and power plant shares can be ensured.

In the course of registration, the BGM selects a limit from the table above and provides the corresponding amount of collateral (within the meaning of Clause 2.4) to Swissgrid.

If a BGM has multiple balance groups, it may not distribute or net the open position over the balance groups. This means that the BGM may only select a limit for one balance group; all other limits of the same legal entity must always mandatorily comply with the smallest limit in the aforementioned table.

$2 - Limit1/2 - PROD_{Max} \leq Open\ Position \leq Limit1/2 - PROD_{Min}$ where a negative open position means a deficit and a positive open position means a surplus. The exceedance arises from the deviation from the described band.

2.2.3 Amendment of the limit

The limit selected by the BGM may in principle be adjusted by both parties at a later date. This is particularly an option for Swissgrid should the BGM behave contrary to the terms of the Contract.

If the BGM would like to adjust the limit, Swissgrid may refuse an adjustment in justified cases, in particular in case of breach of the contract by the BGM. The new limit does not apply until Swissgrid has confirmed it and the corresponding collateral has been provided. In case of an increase of the limit, the amendment normally will be done within five working days after receiving the amended collateral. In case the limit is decreased the amendment normally will be done within five working days. The adjusted lower collateral can be handed in at a later point in time.

2.3 Penalisation

After giving two months' notice, Swissgrid is entitled to adjust the penalisation model specified under Clause 4.2.1 to the penalisation model described below.

As soon as an adjustment has been made, the following applies:

In the event that the limit 3 assigned to the BGM is exceeded, Swissgrid is entitled, regardless of appropriate action and the possibility of suspension according to Clause 14.1 of the Balance Group Contract, to penalise the BGM according to the following rules. Any open positions will be disregarded up to the amount of the deviations listed in the table above within the meaning of the tolerated open position.

2.3.1 Exceeding the limit for the cut-off time intraday (internal transactions) for all balance groups

If the open position of a BGM exceeds the limit for the cut-off time (limit 3), Swissgrid is entitled to initiate the following measures or impose a penalty.

Stage 1

If a limit is exceeded for the first time within six months, a warning is sent to the BGM.

Stage 2

If the BGM exceeds the limit 3 assigned to it again within six months after fulfilling the first stage, the BGM will be charged an additional penalty amounting to the open position minus the assigned limit 3 multiplied by the valid balance energy price.

Stage 3

If the BGM exceeds the limit assigned to it again within three months after fulfilling the second stage, the BGM will be charged an additional penalty amounting to the open position minus the assigned limit 3 multiplied by double the valid balance energy price.

Stage 4

If the BGM exceeds the limit assigned to it again within a further month after fulfilling the third stage, the BGM will be charged an additional penalty amounting to the open position minus the assigned limit 3 multiplied by five times the valid balance energy price.

The respective next stage is reached if at least one exceedance occurs again in a quarter of an hour per schedule day. Repeated exceedances within the same schedule day will not lead to the next stage being reached (day-specific). The basis for the schedule check and the application of the above penalties is the schedule status for the cut-off time intraday (internal trades) for the respective quarter of an hour.

The applicable balancing energy price is determined according to Clause 7.1. In doing so, positive and negative balancing energy prices have to be distinguished. The settlement is performed on a quarterly hour basis using the balancing energy price depending on the concrete positive or negative open position. In the case of a positive position the long price will be applied and in case of a negative position the short price. In case of negative prices the absolute price will be applied (without sign)

Billing is per month within the scope of the monthly billing of the balance energy and is shown separately.

2.3.2 Special provisions in connection with exceeding limit 3 for balance groups without physical feed-in and/or feed-out

For balance groups without physical feed-in and/or feed-out («trade balance groups»), limit 3 applies at the time of the cut-off time intraday (internal transactions) until the end of the post-scheduling process.

The basis for the penalty is the highest exceedance per time interval and per schedule day.

2.3.3 Exceptions

In the following cases Swissgrid will refrain from issuing a penalty if they have led to a limit being exceeded:

1. Intervention in power plant deployment by Swissgrid in a critical grid situation
2. Redispatch measures ordered by Swissgrid
3. Delegation of tertiary control reserve

In the following cases Swissgrid may refrain from issuing a penalty if the BGM sends a corresponding request to the contact office for general queries within 14 days (unless otherwise stipulated below) after the event that caused the limit to be exceeded:

1. Outage of the schedule systems on the part of the BGM (combined with the obligation to report immediately to the contact office for operational queries, but no later than two hours after the outage of the schedule systems) and written report according to the template. In addition the BGM is obliged to be balanced after the post scheduling adjustment.
2. Production failure at the BGM combined with the obligation to supply sufficient proof. This also applies if other balance groups are affected by the production failure.
 - Outage > 100 MW: proof of the REMIT message

In exceptional cases, the BGM may submit a request to Swissgrid to be allowed to provide cash collateral as an alternative to a bank guarantee. Swissgrid shall check in the individual case whether cash collateral is sufficient from a legal point of view to meet Swissgrid's security concerns. To provide the collateral by means of a monetary deposit in a Swissgrid account, the BGM must sign the corresponding supplementary agreement.

In the event that the bank providing the guarantee defaults, the BGM shall immediately provide a new bank guarantee or temporarily provide the required collateral in cash.

2.4.2 Amount of collateral

The amount of collateral is a combination of the following specifications pursuant to Clauses 2.4.2.1 and 2.4.2.2. Should the balance group of the BGM not contain any metering points, Clause 2.4.2.1 shall apply on its own.

2.4.2.1 Amount of collateral from the limits

The amount of collateral is determined based on the open position granted to the BGM and the amounts relating to it, which can be found in the table in Clause 2.2.2.

2.4.2.2 Increase in collateral for balance groups with metering points

For balance groups with metering points (with physical feed-in and/or feed-out), the BGM has to provide further collateral in addition to the collateral for covering the risks arising from the open position, which is calculated according to the following formula:

Collateral = calculation of the average value of the initial bills over twelve months multiplied by the factor three (billing cycle of three months)

For balance groups that newly stipulate physical feed-in and/or feed-out, the following applies:

The collateral is derived from the expected load and production using the following formula in accordance with the master data specification:

Collateral =
$$\frac{\text{Max}(\text{Last}_{Avg}, \text{Prod}_{Avg}) \times 24 \times 365 \times \text{DA} \times \text{AE Short}_{Avg}}{4}$$

The following applies:

Average deviation (DA) = 0.03

Average balance energy price short of the respective previous year (AE Short_{Avg})

After twelve months the amount of collateral will be calculated and adjusted according to the guidelines for existing balance groups with metering points within the meaning of this Clause. In addition, Swissgrid can make an adjustment if it has irrefutable knowledge that indicates an

implausible load and/or production estimate of the BGM or if the average monthly claims exceed 100,000 €

The following applies additionally to existing and new BGMs:

- The amount of collateral is rounded up to a full 50,000 € and levied accordingly.
- If the collateral formula produces an amount of less than 100,000 €, no additional collateral will be levied on top of the collateral according to Clause 2.4.2.1.
- Swissgrid will review the appropriateness of the amount of collateral periodically and adjust it according to Clause 2.4.3.

2.4.3 Adjustment and renewal of collateral

Should the collateral-related limits of the BGM, the amount of collateral according to Clause 2.4.2.2 or other collateral-related factors change, Swissgrid is entitled to review the appropriateness of the amount of collateral at any time (in each case according to Clause 2.4.2.1 and 2.4.2.2 per se). Swissgrid is not obliged to recalculate the amount of collateral within the meaning of the stipulations of Clause 2.4.2 until there is a deviation of +/-25% in relation to the collateral provided (excluding Clause 2.4.2.1). The BGM has to provide the recalculated outstanding amount immediately.

Should the BGM fail to settle any subsequent claim within 14 days, Swissgrid may according to Clause 14.1 of the Balance Group Contract suspend the BGM until adequate collateral has been provided

The BGM is also obliged to renew the bank guarantee it has provided on time. The renewed bank guarantee must have been received by Swissgrid three months before the existing bank guarantee expires. If Swissgrid has not received the new bank guarantee three months before the expiry date, the balance group will be suspended until the new bank guarantee has been received. Once the new bank guarantee has been received, Swissgrid will need up to three working days to check the details and reactivate the balance group. Should Swissgrid accept cash collateral in exceptional cases, the aforementioned provisions shall apply accordingly.

2.4.4 Utilisation of collateral

Swissgrid may use the collateral provided if the BGM fails to meet its payment obligations on time (especially the obligation to pay the balance energy and/or any penalties due to non-compliance with the allocated limit) and does not pay even within the scope of a term of payment set after default has occurred (reminder).

In such a case, Swissgrid may make a subsequent demand for the used collateral under the conditions of Clause 2.4.3.

2.4.5 Return of collateral

If the Balance Group Contract is terminated by a party, the collateral is returned by Swissgrid if the BGM has fulfilled all the obligations set out in this Balance Group Contract. The return of collateral is only possible after all schedules and any correction bills have been settled in full. The BGM agrees that no resultant claims (e.g. within the meaning of default damages) may be asserted.

3 Schedule management

3.1 General

As soon as the balance group has been activated, the BGM is entitled to submit schedule messages.

A schedule message may only contain schedule time series for a single balance group.

Schedule messages must be submitted by the BGM or one of its authorised representatives. Responsibility for ensuring that schedule messages comply with all the conditions stated in the Balance Group Contract, in these General Balance Group Regulations and in the Technical Balance Group Regulations, and which are necessary for proper management, lies solely with the BGM, even in cases where management is carried out by an authorised representative.

The BGM must ensure that the schedule messages it submits do not contain power values for a schedule time unit which conflict with the capacity rights it has acquired in the context of an allocation procedure.

The BGM must respond immediately if any of the schedule messages submitted by the BGM or individual schedule time series are rejected, or if adjustments are made by Swissgrid due to schedule difference rules.

Details of the form, content, submission, time periods, examination and coordination of schedule messages can be found in the Technical Balance Group Regulations. The right to agree specific provisions with control areas adjoining the Swiss control area is reserved. Such provisions are published on the Swissgrid website (www.swissgrid.ch).

3.2 Possible trades

Two trade types are differentiated between in the context of schedule management:

- external trades
- internal trades

3.2.1 External trades

The balance group allows the BGM to manage deliveries of electrical energy between its balance group in the Swiss control area and a balance group assigned to it³ in a neighbouring control area using schedule messages with external schedule time series.

3.2.2 Internal trades between BGs

The balance group allows the BGM to manage deliveries of electrical energy between its balance group and the balance group of another BGM within the Swiss control area. This is achieved by means of schedule messages with internal schedule time series.

³ 1:n nominations are also possible at individual control area borders in Switzerland.

3.2.3 Internal trades for the processing of ancillary services by Swissgrid

For the processing of ancillary services with generating units within the own balance group:

The BGM processes deliveries of electrical energy between its balance group and the Swissgrid balance group through the balance group. This is achieved by means of schedule messages with internal schedule time series.

For the processing of ancillary services with generating units from other balance groups:

Swissgrid processes supplies of electrical energy between the ASP's balance group and the corresponding Swissgrid balance group through the balance group of an ASP with generating units that are not assigned to this balance group. This is achieved by means of schedule messages with internal schedule time series.

When processing the request for ancillary services from generating units from a balance group other than the balance group of the ASP, the compensation takes place through an exchange of the electrical energy requested as per schedule between the balance group to which the generating unit belongs and the corresponding Swissgrid balance group. In doing so, Swissgrid guarantees the correctness of the data on which the schedule exchange is based. In the event of reasonable requests, Swissgrid will check the offline monitoring data and, upon request in justified cases, will make the offline monitoring data available in the agreed granularity.

3.3 Submission and examination of schedule messages

All schedule messages submitted to Swissgrid by the BGM are subjected to a formal examination.

Swissgrid notifies the BGM of the results of this examination. Schedule messages that do not satisfy the required conditions are rejected.

3.4 Requirements for coordinating schedule messages

Schedule coordination in the context of external trade presupposes that consistent schedule messages are also submitted in good time to the relevant transmission system operators (TSOs) in the neighbouring control areas and that the corresponding counterpart schedule messages are submitted to Swissgrid in good time by said TSOs.

Schedule coordination in the context of internal trade presupposes that all counterpart schedule messages are submitted to Swissgrid in good time by the relevant BGMs.

3.5 Coordination of schedule messages

In the case of external trade, schedule coordination is taken care of by Swissgrid jointly with the relevant TSO in the neighbouring control area. This involves comparing the schedule time series from the schedule message of the BGM with the corresponding schedule time series of the TSO.

In the case of internal trades, Swissgrid assumes sole responsibility for schedule coordination. This involves comparing the schedule time series from the schedule message of the BGM with the corresponding schedule time series of the other BGM.

3.6 Schedule difference rules

Swissgrid notifies the BGM of any schedule differences after coordination. The BGM may correct the schedule messages within the defined time periods specified in the Technical Balance Group Regulations.

If it is not possible to correct schedule differences within the defined time periods, Swissgrid applies the schedule difference rules described in the Technical Balance Group Regulations.

If application of the schedule difference rules to individual schedule time series results in the energy balance of the balance group not having a zero balance position, the corresponding balance energy is billed to the BGM. The BGM has the option of minimising the balance energy volume of its balance group through Post-Scheduling Adjustments (cf. Technical Balance Group Regulations).

Any liability by Swissgrid for the application of schedule difference rules or for their (direct or indirect) effects on the BGM or other players is excluded.

4 Maintenance of grid security

4.1 Allocation procedure

4.1.1 Allocation of capacity rights

The allocation procedure can be managed by Swissgrid, the TSO of a neighbouring control area or another body that has been charged with doing so by Swissgrid and/or the TSO.

Participation in an allocation procedure is open to all BGMs in principle, provided the applicable allocation rules have been complied with and the relevant contracts have been concluded.

Details of the allocation procedures are published on the Swissgrid website (www.swissgrid.ch).

4.1.2 Compliance with capacity rights

When a schedule message is prepared, the BGM must comply with the capacity rights to which it is entitled in accordance with the terms of the Technical Balance Group Regulations. If the regulations that are applicable to the respective allocation procedure (auction rules) conflict with other provisions, the auction rules take precedence over the terms of the Technical Balance Group Regulations.

Swissgrid, the TSO in a neighbouring control area and/or one of its authorised bodies monitor compliance with the terms of the Technical Balance Group Regulations and/or the provisions contained in the respective auction rules that pertain to compliance with capacity rights by the BGM. If the BGM's schedule time series fails to comply with these provisions, the schedule time series will be rejected and/or the provisions in the Technical Balance Group Regulations apply.

4.2 Zero power balance requirement

The BGM is responsible vis-à-vis Swissgrid for ensuring the zero power balance position of the power balance of its balance group and in this respect undertakes to ensure that the sum of feed-ins into the balance group (measured feed-ins and/or scheduled deliveries) and the sum of the feed-outs from the balance group (measured feed-outs and/or scheduled deliveries) are

balanced as effectively as possible at all times. The BGM with metering points is obliged to provide forecasts of its load and production. On this basis, the BGM optimally ensures the zero power balance position of its balance group.

The Transmission Code specifications pertaining to «operational implementation of schedule changes and load controls» apply.

4.2.1 Penalisation in the event of an imbalance at the end of the schedule day

If the BGM without measured feed-ins or measured feed-outs (so-called «trading balance groups») infringes the principle of keeping its balance group optimally balanced, a penalty due to violation of system security will be payable for the time period in question as follows:

1. If the imbalance of at least 2.5 MWh per quarter hour within a billing period (one month) occurs for the first time within a period of twelve months, a warning will be sent to the BGM.
2. If the imbalance of at least 2.5 MWh per quarter hour within a billing period (one month) occurs again within a period of twelve months after the last warning, the BGM will be billed an additional penalty amounting to the last balance energy billing.
3. If the imbalance of at least 2.5 MWh per quarter hour within a billing period (one month) occurs again within a period of six months after the last penalty, the BGM will be billed an additional penalty amounting to double the last balance energy billing.
4. If the imbalance of at least 2.5 MWh per quarter hour within a billing period (one month) occurs again within a period of three months after the last penalty, the BGM will be billed an additional penalty amounting to five times the last balance energy billing.

The above-mentioned penalties are applied sequentially according to the above-mentioned numbering. Therefore, for a penalty according to number 3, the penalty according to number 2 has to be settled before.

In the event of slight negligence, which must be proven by the BGM within one month after the imbalance event, Swissgrid will waive billing of the penalty.

4.2.2 Possibility of adjusting the penalisation model

According to the stipulations of the Balance Group Contract, Swissgrid is entitled, after giving two months' notice, to adjust the penalisation model specified under Clause 4.2.1 to the penalisation model described in Clause 2.3.

4.3 Significant load and/or production failures

4.3.1 Procedure in the event of power plant or load failure exceeding 100 MW

In the event of load, pump and/or production failures of more than 100 MW in its balance group, the BGM undertakes to notify Swissgrid without delay (if possible within 15 minutes but no later than 30 minutes after the start of the event) and to provide information about the specific inflow or outflow point and the power shortfall in MW. The BGM must also inform Swissgrid as quickly as possible from what time and in what quantity the BGM procures reserve energy and when the outage ends. Swissgrid Control is the central point of contact for any information required. Swissgrid and the BGM will coordinate the deployment of reserve power by the BGM or control energy by Swissgrid so as to prevent overcompensation associated with additional control energy deployment.

The BGM is responsible for making sure that imbalances in its balance group as a result of a load, pump and/or production failure are compensated within two hours (deployment of reserve contracts, trades, modified deployment of power plants, etc.).

If a systematic imbalance as a result of a load, pump and/or production failure still exists after two hours have passed, from this time until the end of the failure, but not for longer than 24 hours, a penalty of double the balance energy payment is added to the balance energy billing for the period concerned. If the systematic imbalance lasts for more than 24 hours, Swissgrid can deal with this in accordance with Clause 4.2.1.

4.3.2 Additional procedure in the event of power plant or load failure exceeding 400 MW

The type of partner plant in which a managing partner ensures the operation of the power plant and the transfer of the energy as a BGM by means of scheduling is widespread in Switzerland, and in the event of a power plant failure the BGM of the managing partner is responsible for energy compensation in the initial phase. Each power plant partner is then responsible for compensating the missing energy by activating other power reserves or performing trades. The BGM of the managing partner shall ensure that Swissgrid is informed immediately about the fault as well as the causes and anticipated duration of the failure if known.

The limit of 400 MW was chosen because smaller failures can be counteracted quickly using secondary control and only the loss of large amounts of feed-in or feed-out power needs to be handled in accordance with this procedure.

In coordination with the managing partners and distribution system operators (management of distribution facilities control centre), Swissgrid keeps a list of the grid elements for which this document must be applied in the event of a failure. The latest version of this list is published on the Swissgrid website (www.swissgrid.ch).

4.3.2.1 Responsibilities of the managing partner

The BGM shall ensure that the competent managing partner (power plant) informs Swissgrid Control about the following without delay:

- a. the amount of production or pump power lost/missing
- b. the anticipated duration of the failure
- c. the compensation options of the managing partner
 - immediately
 - later, from when until when
- d. the time at which the partner programmes will be adapted

The BGM shall ensure that the managing partner informs Swissgrid Control immediately of any change to these details.

If Swissgrid Control notices a failure without having received a report from the managing power plant partner, its BGM, TSO Markets Deployment shall contact the contact person in accordance with Clause 4.3.3.

4.3.2.2 Responsibility of the power plant partners

The BGM shall ensure that all power plant partners who are not in a position to take responsibility for replacement deliveries at the time defined in accordance with Clause 4.3.3.1.

inform Swissgrid Control immediately and tell them how much cannot be compensated using their own power or via trades.
That way, Swissgrid can coordinate the deployment of control power.

4.3.2.3 Duty to provide information

If the cause and duration of the failure are not conclusively known, the BGM shall ensure that the managing partner updates Swissgrid Control every 30 minutes. If the failure occurred in a nuclear power plant, the power plant itself should inform Swissgrid Control if possible.

4.3.3 Responsibilities and contact persons (single point of contact)

At Swissgrid Control, TSO Markets Deployment is the single point of contact for any information required.

At power plant partners and distribution system operators, the operational 24-hour contact person is responsible for exchanging information. The BGM ensures that the respective operational 24-hour contact person informs Swissgrid Control at regular intervals about any actions in the trading departments of that company. The contact offices are included in the appendices of the operation agreements.

4.4 Faults in the Swissgrid balance group systems

In the event of a fault in the balance group systems, Swissgrid is entitled to restrict or discontinue the management of schedule messages. If such a fault occurs, Swissgrid shall notify the relevant BGMs without delay and take all economically viable measures to re-establish the conditions necessary for proper management of schedule messages.

Swissgrid will notify the BGM in advance of all work on the balance group systems that is essential for proper operation, insofar as such work is foreseeable, and coordinate subsequent action as far as possible.

5 Metering data management

To ensure metering data quality, the BGM compares the imbalance data provided by Swissgrid with the metering data provided by the distribution system operators and the daily schedules supplied by Swissgrid (FCNF). If the BGM detects deviations, it has a vested interest to correct any faults in collaboration with the affected suppliers, power generators and DSOs, and to contribute to future improvements in metering data quality.

The version of the VSE implementation document «Standardised Data Exchange for the Swiss Electricity Market» published on the Swissgrid website (www.swissgrid.ch), including its appendices, applies for all processes related to metering data management and the transfer of the imbalance data for balance energy.

To ensure metering data quality, the Ancillary Service Provider makes suitable procedures accredited by Swissgrid available where necessary that display the control energy delivered by the Ancillary Service Provider in a suitable manner. Where they detect deviations from Swissgrid's request, they shall make an effort, in their own interest, together with Swissgrid to correct faults and contribute to the future improvement of metering data quality.

The parties shall bear the costs resulting from the search for and rectification of errors that are found in the event of an inspection of data requested by the BGM themselves. This means namely that any costs accruing therefrom do not have to be reimbursed by Swissgrid.

6 Determination and billing of the supply of ancillary services

6.1 General

A distinction is made between two types in the determination and billing of the supply of ancillary services. On the one hand, the ASP can provide the ancillary service through generating units in their own balance group. On the other, the ancillary services may also be provided by generating units in other balance groups.

6.2 Determination and billing of the supply of control energy from generating units in the Ancillary Service Provider's balance group

In the case of the supply of control energy from generating units in the ASP's balance group, the contractual provisions of the AS framework agreement apply.

6.3 Determination and billing of the supply of control energy from generating units in balance groups other than that of the Ancillary Service Provider

In the case of the supply of control energy from generating units in balance groups other than that of the Ancillary Service Provider, compensation must take place in the balance group in which the generating units are placed.

Swissgrid shall compensate the BGM for the energy requested from their balance group at the applicable Day Ahead Spot Price (Swissix) for that period. In the case of a positive control energy request, Swissgrid shall reimburse the BGM for energy requested from their balance group accordingly. In the case of a request for negative control energy, the BGM shall reimburse Swissgrid for the requested energy, and Swissgrid shall invoice the same.

7 Calculating and billing the balance energy

7.1 Price mechanism for balance energy

The balance energy price mechanism is a two-price system in which the 15-minute prices for balance energy are classified according to the direction of the 15-minute deviation of a balance group.

The allocation can be inferred from the following table:

Balance group	short (deficit)	BGM pays $(A + P_1) * \alpha_1$
	long (surplus)	BGM receives $(B - P_2) * \alpha_2$

$$A = \max. (P_{\text{spot}}; P_{\text{sek+}}; P_{\text{ter+}})$$

$$B = \min. (P_{\text{spot}}; P_{\text{sek-}}; P_{\text{ter-}})$$

With alpha factors as following	α_1	1.1
	α_2	0.9
With base price as following	P_1	1 ct/kWh
	P_2	0.5 ct/kWh

Note:

1. Within the calculation of the prices A and B, the prices of P_{sek} and P_{ter} will only be used if a use of secondary control or tertiary control occurred in the relevant direction.
2. P_{spot} is the Swissix day-ahead spot price for the given 15-minute period.
3. P_{sek} is the price for the secondary control energy in the given 15-minute period.
4. $P_{\text{ter-/+}}$ is the weighted average price of all tertiary requests in the given 15-minute period.
5. If the price $(A+P_1)$ results in a negative price, the alpha factor α_1 will be replaced by the alpha factor α_2 . If the price $(B-P_2)$ results in a negative price, the alpha factor α_2 will be replaced by the alpha factor α_1 .

The current balance energy prices are published monthly for each 15-minute period on the Swissgrid website (www.swissgrid.ch) until the 15th working day of the following month.

No correction will be made to the balance energy prices seven months after the end of the respective month. If prices are changed retroactively during this period, Swissgrid will inform the balance groups affected by the correction as quickly as possible and publish the new applicable prices.

7.2 Billing balance energy

Swissgrid calculates the imbalance data of the BGM's balance group for each 15-minute period, based on the schedule messages (FCNF) in the balance group system and the production and

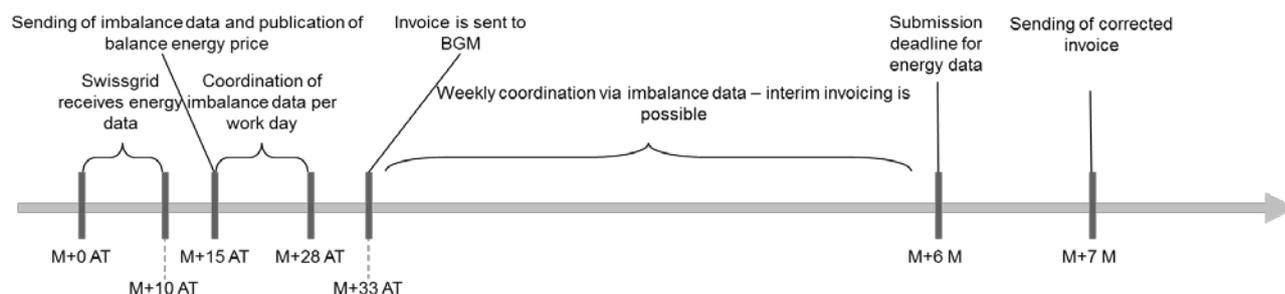
consumption aggregates provided by the distribution system operators. Technical details regarding the imbalance data are taken from the Technical Balance Group Regulations.

For balance energy billing, Swissgrid takes into account the ten-minute ramps upon changes to the schedule balance as prescribed by the Swiss Transmission Code and the ENTSO-E Continental Europe Operation Handbook Policy 1, i.e. if a schedule change is planned, the corresponding variation in power output must take place in a linear fashion if possible over a period of five minutes before and up to five minutes after the schedule interval. Consequently, the balance energy balance can deviate from the value in the imbalance data. However, when calculating ramps, secondary control energy deliveries, tertiary control energy deliveries and redispatch are not considered, as these control energy schedules already represent the desired delivery profile. Factoring in the ramps does not affect BGM scheduling, i.e. ramps may not be incorporated in the schedules submitted to Swissgrid, as otherwise this would result in the systematic use of control energy by Swissgrid.

Balance groups in which no physical feed-ins or feed-outs have occurred during the billing month always have a zero schedule balance. A non-zero schedule balance can occur in the event of scheduling errors. In such cases, the calculation of ramps does not apply.

The deficit or surplus balance energy of the balance group of the BGM is multiplied by the respective 15-minute balance energy price every 15 minutes separately. The 15-minute credits or billed amounts are then totalled separately for the billing month. A monthly bill is issued for billed amounts and credits.

7.3 Billing process



Billing takes place using the values available on the 28th working day after the month's end irrespective of whether all production and consumption aggregates are available. In exceptional cases, particularly in the case of a considerable imbalance of the balance group, Swissgrid is also entitled to bill at shorter intervals (on an instalment basis). If the required data is not available in full or is not of the required quality, Swissgrid is entitled to make a provisional estimate of the metering data as a substitution and to bill provisionally based on this estimate.

Swissgrid delivers the balance energy billing to the BGM electronically in the form of a pdf file to the respective contact office for financial queries by the 33rd working day after the corresponding month's end and debits the BGM via SEPA DD B2B (direct debit only for BGMs with a bank account at a Swiss-based bank that does not support SEPA DD B2B) or pays a credit.

If the required energy data is not sent to Swissgrid on time, is incomplete or is not of the required quality, the DSO may correct the energy data at any time up to six months after the end of the month.

Corrections must be possible in accordance with the Swiss Code of Obligations even after these six months. In order to conclude the billing process, this should be preferably avoided for smaller corrections. In order to enforce this requirement, any outlay incurred for corrections received outside the six-month period may be billed to the causer. The affected balance group(s) and Swissgrid will claim their costs directly from the balance group that triggered the correction.

If the energy data changes within the first six months, a corrected invoice will be generated on the basis of the available data. Swissgrid delivers the corrected invoice to the BGM electronically in the form of a pdf file to the respective contact office for financial queries by the seventh month after the corresponding month's end and debits the BGM via SEPA DD B2B (direct debit only for BGMs with a bank account at a Swiss-based bank that does not support SEPA DD B2B) or pays a credit for the difference from the previous balance energy bill.

At the request of Swissgrid or the BGM, an interim bill may be issued and settled if the difference to the previous balance energy billing for a month is greater than EUR 50,000.

The BGM will be sent a detailed report each time billing occurs. This report will contain the following data for every 15-minute period of the month for the BGM's balance group: the schedule data, the energy data and the resulting imbalance data. The report also contains the balance energy calculated as per Clause 7.2, the balance energy prices and the resulting costs.

8 Remuneration and payment conditions

8.1 Remuneration

Remuneration is in particular:

- a. the registration fee under Clause 1.1 to be paid by the BGM in connection with the establishment of a balance group;
- b. payments for balance energy with respect to the balance group of the BGM, which are calculated with the BGM in accordance with Clause 7.3 on a monthly basis.

8.2 Payment conditions (billing/credit amount)

The amount becomes payable by the BGM within ten days of the billing date. Timeliness of payment is determined by when the payment is received (value date). Once the due date has passed, the consequences of default will automatically enter into force. The default interest rate is 5%.

In justified cases Swissgrid may only settle amounts of at least EUR 100. If the billing amount is less, Swissgrid may settle it with the next bill. In this case, Swissgrid will create a final bill once a year.

Swissgrid stipulates that bills and billed amounts are to be paid exclusively by SEPA DD B2B on the due date. As an alternative, direct debit is possible for BGMs with a Swiss-based bank that does not support SEPA DD B2B. The BGM authorises its clearing bank and issues the necessary directives and authorisations. In justifiable exceptional circumstances, payment via SEPA DD B2B/DD can be waived for a particular party. All payments must be made by the BGM net and without charges.

All prices in this Contract exclude VAT, which is charged additionally at the applicable rate.

8.3 Delivery of bills and credits

Bills and credits are always sent in electronic form. If, in exceptional circumstances, delivery in paper form is required, the BGM will inform Swissgrid of this.