



COMMISSION REGULATION (EU) NO. 543/2013

Article 17.1.a: Rules on Balancing

Tender Rules – Frequency Containment Reserves

	FCR Austria
Required Amount	±64 MW (2018)
Tenders	Procurement of Balancing Reserves Weekly (Friday 12:00 to Tuesday 15:00) Procurement of total quantity
Tendering Period	<ul style="list-style-type: none"> Monday to Sunday
Product Time Slot	<ul style="list-style-type: none"> Monday 00:00 to Sunday 24:00
Minimum Bid	<ul style="list-style-type: none"> 1 MW
Bid Increments	<ul style="list-style-type: none"> 1 MW Steps
Ranking	<ul style="list-style-type: none"> Price of Reserve (€/MW) In case of equal Price of Reserve: Timestamp
Technical Activation	<ul style="list-style-type: none"> Automatically Within 30 seconds

Tender Rules – Automatic Frequency Restoration Reserves



	aFRR Austria
Required Amount	±200 MW
Tenders	Procurement of Balancing Reserves Weekly (Friday 12:00 to Wednesday 15:00) Procurement of partial quantity
Tendering Period	<ul style="list-style-type: none">• Week-product (Monday to Sunday)
Product Time Slot	<ul style="list-style-type: none">• Peak: Mon-Fri, 08:00 to 20:00• Off-Peak: Mon-Fri, 00:00 to 08:00 and 20:00 to 24:00 as well on Saturday, Sunday and Holidays, according to the german federal holiday calendar

Tender Rules – Automatic Frequency Restoration Reserves



	aFRR Austria
Minimum Bid	5 MW
Bid Increments	1 MW Steps
Ranking	<p>Procurement of Balancing Reserves</p> <ol style="list-style-type: none"> 1. Price of Reserve (€/MWh) 2. In case of equal Price of Reserve (€/MWh): <ul style="list-style-type: none"> - Lower Energy Price (pos. SCR) - Higher Energy Price (neg. SCR) 3. In case of equal Price of Reserve and Energy Price: Timestamp
Activation	<p>Ranking of Balancing Energy</p> <ol style="list-style-type: none"> 1. Energy Prices (€/MWh) <ul style="list-style-type: none"> - Lower Energy Price (pos. SCR) - Higher Energy Price (neg. SCR) 2. In case of equal Energy Price Lower Price of Reserve 3. In case of equal Energy Price and Price of Reserve : Timestamp
Technical Activation	<ul style="list-style-type: none"> • Automatically • Within 5 minutes

Tender Rules – Manual Frequency Restoration Reserves



	mFRR Austria	
Required Amount	+200 / -125 MW (Weekly) +80 MW / -45 MW (Daily)	+280 MW / -170 MW (TOTAL)
Tenders	<p>Procurement of Balancing Reserves Weekly Thursday, 09:00 to 13:00 Daily 08:00 to 10:30</p> <p>Day-Ahead - Procurement of Balancing Energy Daily 11:00 to 13:00 Adaption of Energy Prices is possible No additional bids possible</p>	
Tendering Period	<p>Procurement of Balancing Reserves</p> <ul style="list-style-type: none"> • Saturday to Sunday • Monday to Friday <p>Day-Ahead - Procurement of Balancing Energy</p> <ul style="list-style-type: none"> • Next day (on Friday different Tenders for Saturday, Sunday and Monday) 	
Product Time Slots	Blocks of 4 hours: 00-04, 04-08, 08-12, 12-16, 16-20, 20-24	
Minimum Bid	First bid for each block: 1 - 50 MW Further bids for each block: 5 - 50 MW	
Bid Increments	1 MW Steps	

Tender Rules – Manual Frequency Restoration Reserves



	mFRR Austria
Ranking	Procurement of Balancing Reserves <ol style="list-style-type: none">1. Price of Reserve (€/MWh)2. In case of equal Price of Reserve (€/MWh):<ul style="list-style-type: none">- Lower Energy Price (pos. TCR)- Higher Energy Price (neg. TCR)3. In case of equal Price of Reserve and Energy Price: Timestamp
Activation	Day-Ahead - Procurement of Balancing Energy <ol style="list-style-type: none">1. Lower Energy Price (pos. TCR) Higher Energy Price (neg. TCR)2. In case of equal Energy Prices and tender amount: Timestamp
Technical Activation	<ul style="list-style-type: none">• Manually (Activation via Web-Service)• Within 10 minutes

Procurement Rules – Payment



	Balancing Reserve	Balancing Energy
Frequency Containment Reserves	Pay as Bid MW x EUR/MW per Bid	No energy remuneration
Automatic Frequency Restoration Reserves	Pay as Bid MWh x EUR/MWh per Bid	Pay as Bid Activated MWh x EUR/MWh per Bid
Manual Frequency Restoration Reserves	Pay as Bid MWh x EUR/MWh per Bid	Pay as Bid Activated MWh x EUR/MWh per Bid

Additional Information



	Link
Frequency Containment Reserves	http://www.apg.at/en/market/balancing/primary-control/tenders
Automatic Frequency Restoration Reserves	http://www.apg.at/en/market/balancing/secondary-control/tenders
Manual Frequency Restoration Reserves	http://www.apg.at/en/market/balancing/tertiary-control/tenders

Imbalance Netting Cooperation

The Imbalance Netting Cooperation (“INC”) is a Cooperation between APG ELES and HOPS (Load Frequency Control (LFC) Areas Austria, Slovenia & Croatia) where an Imbalance Netting Process allows avoidance of simultaneous FRR activation in opposite directions by taking into account the respective Frequency Restoration Control Errors (FRCE) as well as activated FRR and correcting the input of the involved Frequency Restoration Processes (FRP) accordingly, under consideration of the free cross border capacities after Intraday Gate Closure. The process is carried out in a 2 seconds granularity. The Imbalance Netting Process is a pure TSO-TSO product.

International Grid Control Cooperation

The International Grid Control Cooperation (“IGCC”) is a Cooperation between the LFC Areas of 50Hertz, Amprion, APG, CEPS, ELIA, EnerginetDK Swissgrid, TennetDE, TennetNL, TransnetBW and RTE (LFC Areas Germany, Austria, Switzerland, The Netherlands, Czech Republic, Belgium, Denmark and France) where an Imbalance Netting Process allows avoidance of simultaneous FRR activation in opposite directions by taking into account the respective FRCEs as well as activated FRR and correcting the input of the involved FRPs accordingly, under consideration of the free cross border capacities after Intraday Gate Closure. The process is carried out in a 4 seconds granularity. The Imbalance Netting Process is a pure TSO-TSO product.

Cross-border market for FCR based on TSO-TSO model:

The Cross-border market for FCR based on TSO-TSO model establishes one common market for the procurement of FCR between Austria Switzerland, Germany, Denmark, Netherlands, Belgium and France. This initiative aims at a full scale integration of the two markets for FCR and not only at an “opportunistic” exchange of balancing services based on specific needs and circumstances. Corresponding to the TSO-TSO model, individual TSOs serve as the sole interface towards market participants in the respective countries. APG, Swissgrid, 50Hertz, Amprion, TennetDE, TennetNL, TransnetBW, EnerginetDK, Elia and RTE furthermore procure the necessary primary control reserves in their national tenders, in which balancing providers can participate after a technical and organizational examination (so called prequalification process). After the common gate Closure time of the national tender platforms, surplus bids can be transferred into the respective other market and taken into account there for the procurement if they are cheaper than the domestic bids according to the common Merit Order (“economic welfare”) and in compliance with the ENTSO-E rules.