

Report on balancing 2026

Executive summary



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Regulation 2017/2195 Art. 60 2. requires Transmission System Operators (TSO) to publish a report on balancing semi-annually. This is the report and executive summary.

Specific products

EB GL 60 2. (a and d):

Statnett introduced in 2025 a new product, mFRR-D. This is not a standard product, due to not follow requirement of standard activation time and ramping. These reserves are acquired only to aid in special situations where reference incident occurs or there are other severe situations in the grid.

From 4th of March 2025 Statnett started to contract 800 MW in upward direction, which continued throughout 2025. No volume was activated in 2025.

The procurement of mFRR-D reduces the volume Statnett has to procure of standard mFRR to cover reference incidents in upward direction. The reserves in mFRR-D are not eligible to participate in the standard mFRR market.

Dimensioning of Reserve Capacity and Capacity procurement

EB GL 60 2. (b):

The Nordic countries coordination dimensioning of FCR and aFRR. This concerns FFR, aFRR and FCR products, FCR-N, FCR-D Up and FCR-D Down. FCR-D (Disturbance) is dimensioned to cover the largest reference incident. FCR-N is dimensioned to cover normal imbalances and load invariability, and to meet frequency targets (49.9-50.1 Hz normal band). aFRR and mFRR are used to restore the frequency to 50.0 Hz. FFR is dimensioned based on the amount of kinetic energy in the Nordic power system. The FFR capacity shall keep the frequency above 49.0 Hz in case of a reference incident disturbance.

Each of the Nordic countries must cover their share of the total requirement. The sharing is based on the total yearly consumption and production relative to the totals of all Nordic countries.

Reserve product	Nordic volume	National share	National requirement
FCR-D Up	1450 MW	38%	545 MW
FCR-D Down	1400 MW	38%	526 MW
FCR-N	600 MW	38%	226 MW
aFRR Up	300-400 MW*	46%	138-184 MW
aFRR Down	300-400 MW*	43%	129-172 MW
mFRR			1400 MW (+ 720 MW)**
FFR	~300 MW	39%	117 MW

Table 1: Shares and volume of reserve product for 2024

Reserve product	Nordic volume MW	National share	National require. MW	Number of BSPs
FCR-D Up	1450	39%	565	20
FCR-D Down	1400	39%	546	20
FCR-N	600	39%	234	20
aFRR Up	200-500*	46%	92-230*	7
aFRR Down	200-500*	43%	86-215*	7
mFRR			***	30
FFR	~300	39%	117	9

Table 2: Shares and volume of reserve product for 2025

* Varies with season

** 720 MW to cover normal imbalances

*** Requirement varies with seasonal variation load, production, HVDC interconnector plans

Optimal provision of reserve capacity

EB GL 60 2. (c):

Until 4th of March 2025 the formal requirement for mFRR reserve capacity was that each control area shall cover the largest possible dimensioning fault in upward direction in addition to normal imbalances. After 4th of March 2025 the transition to automatic balancing (mFRR EAM), the requirement for mFRR reserves has been radically changed. Each bidding zone shall now cover dimensioning faults and normal imbalances.

Earlier the dimensioning of reserves had a step wise transition process.

In February 2024, the procurement of mFRR was changed from a week ahead market to a day ahead market, which still is in operation today as the Nordic capacity market. Reservations for exchange of mFRR (internally in the Norwegian bidding zones) became a part of the clearing process.

A part of the mFRR reserves (~800 MW) are procured through a national month ahead market (mFRR-D). These reserves are acquired only to aid in special cases where reference incident occurs or there are other severe situations in the grid. Therefore, these reserves are not available for the AOF (Automatic Optimization Function) in the day-to-day operations.

With the implementation of mFRR EAM, 4th of March 2025, the Nordic TSO decided to increase the total procurement of aFRR to 500 MW for both up- and downwards balancing. The total volume of aFRR has been reduced in a stepwise approach and was in Q4/2025 varying between 250-275 MW for upwards balancing and 300-375 MW for downwards balancing.

Norway participates in the common Nordic capacity market which facilitates the D-1 procurement of aFRR and mFRR reserves. Norway does not currently share mFRR with neighboring TSOs through the D-1 mFRR capacity market.

Norway is exchanging aFRR reserves on the NO-SE corridors. Internally there is no sharing of aFRR and mFRR reserves in the D-1 capacity market between the north area (NO3, NO4) and the south area (NO1, NO2, NO5). mFRR capacity is now available on corridors NO-SE and NO2-DK1 on energy delivery day and follows the mFRR EAM model.

Assessment of sharing and exchange of reserves

EB GL 60 2. (e-f):

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Efficiency of activation and optimization functions

EB GL 60 2. (g):

Before the introduction of mFRR EAM, the Nordic countries operated with more manual approaches to activating balancing energy from FRR. With the implementation of mFRR EAM in 2025, the activation optimization functions have significantly improved, enabling more efficient and coordinated balancing across the region.

The Nordic TSOs, including Statnett, now use a common market solution called Nordic LIBRA for mFRR activation, following principles from the European MARI platform, which optimizes the selection of bids based on cost and system constraints.

As a result, both operational efficiency and frequency quality have improved following the introduction of mFRR EAM. For reference, the number of minutes outside the frequency band (49,9-50,1Hz) was 10330 in 2024 and was reduced to 5094 in 2025, which is a reduction to the better of more than 50%.

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