Common position paper of CWE NRAs on the update of the Day-Ahead Flow-Based Market Coupling methodology submitted on 17 December 2018

11 January 2019

Context

In March 2015, the NRAs of the Central West Europe region (hereafter CWE) approved the CWE Flow-Based Market Coupling (hereafter FBMC) methodology, whose principles and details had been developed since 2007 by the project partners (TSOs and PXs) under the supervision of CWE NRAs. The CWE FBMC went live for the day-ahead time frame in May 2015[1].

FBMC is based on a more precise capacity calculation that takes account of the interdependency between commercial flows on affected transmission network elements called critical branches (hereafter CB) by maximising as much as possible their use by the most valuable exchanges. Since its implementation, CWE FBMC has allowed a significant increase in maximum exchanges between CWE bidding zones by enlarging the capacity domain compared to the previous ATC method[2].

In the highly meshed electricity grid of Western Europe, this increase in maximum exchanges between CWE bidding zones has also affected neighbouring networks. In particular, Swiss stakeholders (TSO, NRA and Ministry) have reported a notable rise in forecasted and physical flows on the Swiss network and an increase of the occurrence of N-1 security violations. In their view, this development has contributed to growing system security issues in some critical periods, which was acknowledged by the members of the Pentalateral Energy Forum[3] (hereafter PLEF) during their meeting on 9 July 2018. CWE TSOs and NRAs committed to working with the Swiss TSO (Swissgrid) and NRA (ElCom) on a solution to mitigate the impact of CWE flows on the Swiss network during tensed situations.

Different options have been identified, such as the inclusion of Swiss CBs in the CWE FBMC algorithm, a strengthened coordination during the capacity validation phase in D-2 or the establishment of a trilateral redispatch scheme between the Swiss, German and French TSOs. CWE TSOs and Swissgrid presented their preferred option to the PLEF members on 18 September 2018, consisting of the introduction of an external constraint (hereafter EC) on the French import position that would be

[1] An updated version of the CWE FBMC methodology reflecting the inclusion of the DE/LU-AT-border and the introduction of the 20% minRAM requirement was approved by CWE NRAs in September 2018.
[2] The ATC method determines allocated transmission capacity bilaterally for each bidding zone border.
[3] The PLEF gathers TSOs, NRAs and Ministries of Austria, Belgium, France, Germany, Luxemburg, the Netherlands and Switzerland (as an observer).

applied in specific periods (typically in winter) when system security issues are foreseen in Switzerland. The measure will allow reducing imports to France from CWE when the flow-based capacity domain could lead to overloads on network elements of North-Western Switzerland that Swissgrid could not address by any other means, such as PST tap changes or internal redispatch actions, provided that RTE has not identified system security issues on its network.

CWE NRAs have asked CWE TSOs and Swissgrid to provide more information on the functioning of this measure and the criteria based on which it was considered the preferred one. CWE TSOs and Swissgrid delivered this information in mid-November 2018.

Furthermore, considering that the proposed measure conflicted with the CWE FBMC methodology[4], CWE NRAs have required CWE TSOs to submit an updated approval package reflecting the introduction of an EC on the French import position in specific periods when system security issues are foreseen in Switzerland.

Legal basis

The legal basis under which the CWE FBMC methodology was developed and submitted for approval is Regulation 714/2009 and its Annex 1 as well as Directive 2009/72/EC[5]. This legal basis remains unchanged for the proposed changes to CWE FBMC.

Description of the proposal

The updated CWE FBMC approval package includes the main change discussed in the Context section above, being the application of a French import EC for the winter 2018-2019 until 30 April 2019 in case security issues are foreseen in Switzerland.

The conditions for application of this temporary French import EC are the following ones:

- the measure is applied when the French import position from CWE is expected to be higher than 6.5 GW and Belgium is expected to also import from CWE at the same time;
- the measure can only be applied in the hours between 01:00 – 05:00 and the whole Sunday;
- the measure is limited to 100 hours and once these hours are “used”, no further EC is allowed;
- the measure is limited to the situations when all other remedial actions available to Swissgrid have been fully used; and
- RTE, in case of expected operational issues, can reject the reduction request made by Swissgrid without an appeal.

[4] The CWE FBMC methodology approved in September 2018 does not allow RTE to apply external constraints.

[5] Article 37(6) of Directive 2009/72 of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity provides that regulatory authorities shall be responsible for fixing or approving sufficiently in advance of their entry into force the methodologies used to calculate or establish the terms and conditions for access to cross-border infrastructures, including the procedures for the allocation of capacity and congestion management.

The maximum achievable French import from CWE can thus be reduced by a value of maximum 1,000 MW. For example, if the French import position from CWE achievable in the FB domain is 7 GW, the French import EC would be set between 6 GW and 7 GW.

This change is incorporated in the CWE FBMC approval package that consists of three parts:

- the DA methodology including the main change described above;
- a new annex (Annex 15.29) describing the conditions and processes for application of the French import EC; and
- a communication from CWE TSOs to implement the foreseen measure.

Analysis of the proposal

Based on the evidence provided by the Swiss TSO, NRA and Ministry, CWE NRAs acknowledge the impact of the increase in maximum exchanges between CWE bidding zones on the Swiss system, in particular in situations when it seems to be difficult to address overloads on some Swiss network elements by Swiss internal means. CWE NRAs also recognise the importance of guaranteeing the TSOs' ability to maintain a secure system operation in the Western European electricity grid.

Among the different options explored, CWE TSOs and Swissgrid have presented the introduction of an EC on the French import position as being the fastest implementable and most pragmatic measure to mitigate the impact of CWE flows on the Swiss network during tensed situations. Such measure will rely on operational procedures that already exist or can be developed swiftly, while alternative options would have required more preparation time and therefore were inappropriate to address system security issues during the winter 2018-2019.

Furthermore, CWE TSOs and Swissgrid have committed to respecting the exceptional nature of this measure by limiting its application for the winter 2018-2019 until 30 April 2019 and engaging in deepened coordination as soon as possible to develop an enduring solution for the upcoming winters.

Considering the arguments presented above, CWE NRAs find the proposed measure acceptable for winter 2018-2019.

Conclusion

CWE NRAs agree with the updated CWE FBMC that introduces an EC on the French import position when system security issues are foreseen in Switzerland as an exceptional measure for the winter 2018-2019. The measure will only be implemented from the date of operational readiness, expected by the end of January 2019, until 30 April 2019 and RTE will not apply any EC afterwards.

CWE NRAs expect CWE TSOs to ensure a high level of transparency on this measure. In particular, CWE TSOs are required to timely publish a market message on JAO when the French import EC will be applied. Until 30 July 2019, CWE TSOs and Swissgrid will deliver to CWE NRAs a monitoring report justifying that not sufficient internal means were available and analysing the impact of the French import EC on the CWE capacity domain for all market time units during which it was applied.

CWE NRAs support and emphasize the need for CWE TSOs and Swissgrid to engage in deepened coordination as soon as possible to develop an enduring solution for the upcoming winters and to

propose a roadmap towards this objective. As long as Switzerland is not part of the single day-ahead market coupling, this enduring solution shall be based on a strengthened coordination during the capacity calculation processes or the establishment of a dedicated redispatch scheme. CWE NRAs expect to be closely involved in this process. They require that CWE TSOs propose the enduring solution to CWE NRAs for endorsement and that any future amendment of the approval package should be submitted with sufficient notice to CWE NRAs at least six months before the go-live of the solution.