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Transmission Code and Balancing Concept Information on entry into force

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1 General information

Two revised electrical industry documents – <u>Transmission Code and Balancing Concept</u> – came into force on 7 May 2020.

The Transmission Code (TC) is Swissgrid's key industry document. It describes the interfaces between Swissgrid and the system operators and market players of relevance for the transmission grid. The existing TC version dated from 2013. Since then, the current practice has changed and the EU Network Codes also came into force between 2015-2017. These are the key drivers which made a revision necessary.

The Balancing Concept (BC) describes how the power market and balance group management work in Switzerland, in particular the interface between Swissgrid and the balance group managers. The existing BC dated from 2012. The trigger for the current revision was the fact that elements from the TC and the balance group contract were governed again in the BC. Duplicated content was deleted and the risk of inconsistencies was reduced.

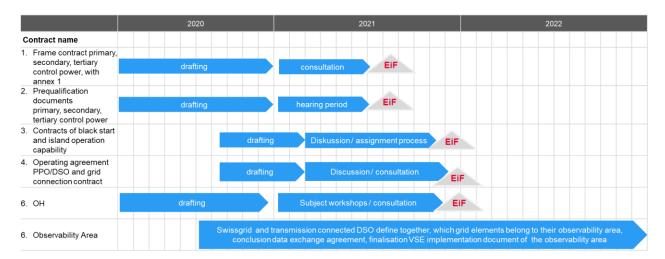
The various players are requested to carefully read and take note of the following information as it applies to them. Any questions can be directed to info@swissgrid.ch.

It is important for all players and their employees who work with the national grid company, particularly with regards to grid planning, grid connection, grid operations, ancillary services and balance group management, to be aware of the updated TC/BC.

Swissgrid will update electrical industry contracts and annexes and submit them for consultation. The Operational Handbook (OH) will also be revised. By this means, amongst others, the new regulations of the TC will be put into actual practice.



The following chart provides an overview of the documents in question and an initial rough timetable. Swissgrid will also approach the industry and contract partners specifically with regards to the separate industry agreements and consultations.



EiF = Entry into Force

In the course of the update, Swissgrid plans to adapt the structure of the operating agreements to market developments. Swissgrid will prepare a proposal in this respect and coordinate on it with electrical industry representatives.

2 Changes for various players

Please find below the most important changes in the TC/BC, listed separately for the various players.

2.1 Balance group managers (BGM)

The revision of the BC and TC ensures that current practice on the basis of the applicable balance group contract is also consistently reflected in the electrical industry documents. Consequently, there is no need for the BGMs to take any action. Nor are there any plans to revise the balance group contract at present. For employees who work in energy trading and schedule management, and particularly for new employees, the BC is a very good source of information for understanding how the market model works in Switzerland.

2.2 Ancillary service provider (ASP)

Section 4 of the TC summarises the principles and requirements for the procurement of ancillary services. The procurement of control power, active power losses and black start / island operation capability are contractually governed in frame agreements and tendering conditions. Measures relating to voltage maintenance are governed in the annexes to the operating agreements with PPOs and DSOs.

The frame contracts and prequalification conditions for control power procurement are currently being revised. Consultation on these will take place at the beginning of 2021 and they will then enter into force. Swissgrid will put the black start and island operation capability for the next 5-year period out to tender in 2021. The documents required for this will be available in 2021.



2.3 Operators and owners of transmission-connected systems

2.3.1 Grid connection

Section 6 of the TC governs the grid connection for owners of transmission-connected systems.

A distinction is made between new and existing power plants. Existing power plants on the transmission grid must document the differences between the requirements in the TC and the technical capabilities of their systems or update the existing documentation. The differences are now documented in annex 1 to the grid connection contract (owner view) and in annex 2 to the operating agreement (operator view). The contractual partners are requested to inform Swissgrid of the need to modify the aforementioned annexes by the end of Q3/2020.

Swissgrid will then check whether the differences could result in a serious threat to system security and stability. If this is the case, Swissgrid and the contractual partner must take suitable measures to safeguard system security and stability.

2.3.2 Observability area

The observability area is introduced in section 1.5 of the TC. Swissgrid will contact each DSO on the transmission grid by the end of 2022. The grid elements of relevance for both parties will be identified and action will be taken to ensure that they are observed in grid operational planning and in grid operation. The necessary exchange of data between Swissgrid and the transmission connected DSOs will also be governed contractually. Further information about the observability area is described in a VSE implementation document, which is available in draft form. This document will be further developed in the course of the project and then submitted for consultation in the industry.

2.3.3 Grid operation

· Grid states, critical grid situations, right to issue directives:

It is important for all the employees in the control centres to have a common understanding of the above terms, which are defined in section 2.1 of the TC. These will be covered in the next joint dispatcher training courses.

Outage planning:

Section 2.3 of the TC formulates the principles of outage planning. There have been some elaborations in this respect. These will be included in the revised OH or in the operating agreement.

• Disturbance management:

Section 5 of the TC describes the roles of the players and measures in the context of disturbance management. The operational employees of all the players must be aware of these principles and measures. These matters will also be covered in the coming training courses. They will be further elaborated in the revised OH or operating agreement (incl. grid restoration concept).



3 Overview of regulatory requirements and overview of downstream electrical industry documents and contracts

Section 9 of the TC provides an overview of where the regulatory requirements for the requirements in the TC can be found. There is also a second table providing information about which documents cover the elaboration and implementation of the requirements in the TC. These two tables can be updated at any time. Information regarding additions to these tables can be sent to info@swissgrid.ch.

4 Glossary and abbreviations

The VSE plans to publish the revised electrical industry glossary in the course of the year. This will also include explanations of the technical terms and abbreviations from TC and BC. In the course of the planned adaptation of the electrical industry contracts and the Operational Handbook, Swissgrid plans to coordinate the terms with this glossary, as soon as it is available.