

BALANCING CODE NO. 5
(BC5)

PREQUALIFICATION PROCESSES

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PREQUALIFICATION

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the **FCR** Minimum Technical Requirements as defined in BC5.2.1.

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A transitional period for the introduction of FCR Minimum Technical Requirements, as defined in BC5.2.1 and BC5.2.2, shall apply for those **FCR** providers who are not an **EU Code User**.

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BC5.2.1

FCR Minimum Technical Requirements

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Each **FCR** provider shall have the right to aggregate the respective data for more than one **FCR** providing unit if the maximum power of the aggregated units is below 1.5 MW and a clear verification of activation of **FCR** is possible.

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Each **FCR** providing unit and each **FCR** providing group shall;

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(a) activate the agreed **FCR** by means of a proportional governor or load controller reacting to **Ffrequency** deviations or alternatively based on a monotonic piecewise linear power-frequency characteristic in case of relay activated **FCR**.

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(b) be capable of activating **FCR** within the **Ffrequency** ranges specified in the in **CC.6.1.3** and **ECC.6.1.2.1.2**.

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(c) and comply with the following properties

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(i) Maximum combined effect of inherent **Ffrequency Response Insensitivity** and possible intentional **Ffrequency Response Dead-band** of the governor or load controller of the **FCR** providing units or **FCR** providing groups of ± 15 mHz

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(ii) **FCR** full activation time of 10 s

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(iii) **FCR** full activation **Ffrequency** deviation of ± 500 mHz

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(d) **S**specify the limitations of the energy reservoir of its **FCR** providing units or **FCR**.

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(e) Each **FCR** provider shall be capable of making available to **The Company**, for each of its **FCR** providing units and **FCR** providing groups, at least the following information:

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(i) time-stamped status indicating if **FCR** is on or off;

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(ii) time-stamped active power data needed to verify **FCR** activation, including time-stamped instantaneous **Aactive Ppower**; and

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(iii) droop of the governor or load controller for **Type C Power Generating Modules** and **Type D Power Generating Modules** acting as **FCR** providing units, or its equivalent parameter for **FCR** providing groups consisting of **Type A Power Generating Modules** and/or **Type B Power Generating Modules**, and/or **Demand Units with Demand Response Active Power**.

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(f) An **FCR** provider shall guarantee the continuous availability of **FCR**, with the exception of a forced outage of a **FCR** providing unit, during the period of time in which it is obliged to provide **FCR**.

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(g) Each **FCR** provider shall inform **The Company**, as soon as possible, about any changes in the actual availability of its **FCR** providing unit and/or its **FCR** providing group, in whole or in part, relevant for the results of this prequalification.

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BC5.2.2

In addition to the requirements in BC5.2.1, where a relevant **Balancing Service** is provided by **a**-reserve providing groups or units located in the distribution

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systems, **The Company** shall ensure that the prequalification process requires the following to be specified;

- (a) voltage levels and connection points of the reserve providing units or groups;
- (b) the DNO(s) who operate the distribution **systems** to which the reserve providing **units** or groups are connected;
- (c) the type of **Active Power** reserves;
- (d) the maximum reserve capacity provided by the reserve providing units or groups at each connection point; and
- (e) the maximum rate of change of **Active Power** for the reserve providing units or groups.

The relevant DNOs will identify potential distribution network restrictions, based on technical reasons, on the provision of the proposed Balancing Service by the reserve providing groups or units.

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BC 5.3

FRR PREQUALIFICATION PROCESS

The Company shall ensure that each relevant Balancing Service prequalification process shall, as a minimum, require the **FRR** provider to submit a self-certification of the **FRR** Minimum Technical Requirements as defined in BC5.3.1 and BC5.3.2.

BC5.3.1

FRR Minimum Technical Requirements

Each **FRR** providing unit and each **FRR** providing group shall;

- (a) activate **FRR** in accordance with the setpoint received from **The Company**;
- (b) ensure that the **FRR** activation of the **FRR** providing units within a reserve providing group can be monitored. For that purpose the **FRR** provider shall be capable of supplying to **The Company** real-time measurements of the connection point or another point of interaction agreed with **The Company** concerning:
 - (i) time-stamped scheduled **Active Power** output;
 - (ii) time-stamped instantaneous **Active Power** for:
 - each **FRR** providing unit,
 - each **FRR** providing group, and
 - each **Power Generating Module** or **Demand** unit of a **FRR** providing group with a maximum **Active Power** output larger than or equal to 1.5 MW;
- (c) a **FRR** providing unit or **FRR** providing group for automatic **FRR** shall have an automatic **FRR** activation delay not exceeding 30 seconds;
- (d) be capable of activating its complete manual reserve capacity on **FRR** within the **FRR** full activation time;
- (e) fulfil the **FRR** availability requirements;
- (f) fulfil the ramping rate requirements
- (g) inform **The Company** about a reduction of the actual availability of its **FRR** providing unit or its **FRR** providing group or a part of its **FRR** providing group as soon as possible.

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BC5.3.2 In addition to the requirements in BC5.3.1, where a relevant **Balancing**

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Service is provided by a reserve providing groups or units located in the distribution systems, The Company shall ensure that the prequalification process requires the following to be specified;

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- (a) voltage levels and connection points of the reserve providing units or groups;
- (b) the DNO(s) who operate the distribution systems to which the reserve providing units or groups are connected;
- (c) the type of Active Power reserves;
- (d) the maximum reserve capacity provided by the reserve providing units or groups at each connection point; and
- (e) the maximum rate of change of Active Power for the reserve providing units or group

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The relevant DNOs will identify potential distribution network restrictions, based on technical reasons, on the provision of the proposed Balancing Service by the reserve providing groups or units.

BC5.4

RR PREQUALIFICATION PROCESS

The Company shall ensure that each relevant Balancing Service prequalification process shall, as a minimum, require the RR provider to submit a self-certification of the RR Minimum Technical Requirements as defined in BC5.4.1 and BC5.4.2.

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BC5.4.1

RR Minimum Technical Requirements

Each RR providing unit and each RR providing group shall;

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- (a) activate RR in accordance with the setpoint received from The Company;
- (b) ensure activation of complete reserve capacity on RR within the activation time defined by The Company;
- (c) ensure de-activation of RR according to the setpoint received from The Company;
- (d) ensure that the RR activation of the RR providing units within a reserve providing group can be monitored. For that purpose, the RR provider shall be capable of supplying to The Company real-time measurements of the connection point or another point of interaction agreed with The Company:
 - (i) the time-stamped scheduled a Active Power output, for each RR providing unit and group and for each Power Generating Module or Demand unit of a RR providing group with maximum Active Power output larger than or equal to 1.5 MW;
 - (ii) the time-stamped instantaneous Active Power, for each RR providing unit and group, and for each Power Generating Module or Demand unit of a RR providing group with a maximum Active Power output greater than or equal to 1.5 MW;
- (e) ensure fulfilment of the RR availability requirements

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(f) inform **The Company** about a reduction of the actual availability or a forced outage of its **RR** providing unit or its **RR** providing group or a part of its **RR** providing group as soon as possible.

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BC5.4.2

In addition to the requirements in BC5.4.1, where a relevant **Balancing Service** is provided by a reserve providing groups or units located in the distribution **systems**, **The Company** shall ensure that the prequalification process requires the following to be specified;

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- (a) voltage levels and connection points of the reserve providing units or groups;
- (b) the DNO(s) who operate the distribution systems to which the reserve providing units or groups are connected;
- (c) the type of **Aactive Ppower** reserves;
- (d) the maximum reserve capacity provided by the reserve providing units or groups at each connection point; and
- (e) the maximum rate of change of **Aactive Ppower** for the reserve providing units or groups.

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The relevant DNOs will identify potential distribution network restrictions on the provision of the proposed Balancing Service by the reserve providing groups or units.

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