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1 Technical and operational requirements

Each generating unit (GU) participating in primary control must demonstrate that it possesses the following performance characteristics.

1.1 Type of generating unit

The provider must specify the type of GU for each GU that is to participate in the primary control for the Swissgrid tender. The following two declarations are possible: conventional GU or virtual GU. If the GU is virtual, the provider submits a list of all substations, including their addresses (see the document Requirements of the List of Generating Units at www.swissgrid.ch).

Requirement met	Yes	No	Comment No. _____
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1.2 Feed-in point

The provider must specify the place of feed-in (grid node) for each GU that is to participate in the primary control for the Swissgrid tender. This requirement is eliminated for GUs located in lower-level grids or for virtual GUs, provided that evidence is given that the necessary information about the place of feed-in cannot be obtained.

Requirement met	Yes	No	Comment No. _____
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1.3 Commissioning

During the period for which reserve and provision have been contracted, the provider is responsible for placing its own GU on-stream. Special instructions will not be issued by Swissgrid.

Requirement met	Yes	No	Comment No. _____
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1.4 Technical implementation of primary control

For each GU that participates in primary control, the technical implementation of the primary control is to be specified and the technical documentation is to be sent to Swissgrid.

Requirement met	Yes	No	Comment No. _____
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1.5 Available primary control band

The provider of primary control power must ensure that the available control band per GU can be verified using the installed instrumentation for a frequency deviation of ± 200 mHz above the measurement tolerances and above the sensitivity range of its plant.

The prequalifying party specifies the adjustable primary control range made available in the scheduled GU, as well as the rated power of the GU (enclose attachment).

Maintenance and provision is implemented in accordance with the product structure published as part of the respective invitation to tender.

Requirement met	Yes	No	Comment No._____
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1.6 Accuracy of frequency measurement of primary control

For primary control, the frequency measurement tolerance must be below ± 10 mHz.

Requirement met	Yes	No	Comment No._____
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1.7 Insensitivity range

The insensitivity range is the range defined by the deviation of the frequency from the setpoint value in which the GU does not provide primary control power when using the primary control device. This range shall be submitted to Swissgrid.

The provider shall undertake to ensure that the insensitivity range of its GU is less than ± 10 mHz and that the network characteristics (x MW) for which it's bid has been accepted, are maintained outside the permissible deadband at each operating point (network characteristics: linear change in output power relative to the deviation from the setpoint frequency, with a rate of rise of x MW/200 mHz).

Requirement met	Yes	No	Comment No._____
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1.8 Rate of activation

The primary control power offered must be capable of being evenly activated within 30 seconds and of being deployed for at least 15 minutes in the event of any quasi-stationary frequency deviation of ± 200 mHz.

Requirement met	Yes	No	Comment No._____
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1.9 Droop

Droop is the quotient of the relative quasi-stationary frequency deviation in the grid ($\Delta f/f_N$) and the relative variation in power output ($\Delta P_G/P_{GN}$) from the GU influenced by the action of the controller. The droop of each GU that is to be operated under primary control must be specified to Swissgrid. If the droop of the GU can be adjusted, Swissgrid must be notified of the adjustment possibilities.

Requirement met	Yes	No	Comment No._____
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1.10 Primary control capability in load-following operation

Each GU which is operated under primary control must be capable of providing primary control power even if it is operated in a load-following mode and/or additionally under secondary control.

Requirement met	Yes	No	Comment No._____
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2 General requirements

2.1 Function checks

As part of the prequalification on site or in the corresponding control centre, Swissgrid reserves the right to require a functional check of the primary control capability of the GUs that were offered for the provision of primary control power. This can be carried out by means of specially applied performance tests (e.g. through application of admissible test signals to the controller) or during operation of the GU under primary control. For this purpose, the prequalifying party shall grant Swissgrid full transparency regarding traceability of the provision of primary control power.

The primary control test is performed in accordance with the document «Test for primary control capability» (published at www.swissgrid.ch).

Swissgrid reserves the right to take control readings at specific intervals as described above as part of its due diligence as grid operator.

The safety of the GU must not be impaired by these measures.

Requirement met	Yes	No	Comment No._____
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2.2 Place of performance

The place of performance is the place at which primary control power is provided. Any grid utilisation charges arising from the provision of primary control power shall be borne by the provider.

Requirement met	Yes	No	Comment No._____
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2.3 Place of performance outside Switzerland

Where the place of performance is outside the Swiss control area, the necessary agreements must have been concluded with the responsible control area operator and their organisational and technical guidelines complied with.

Requirement met	Yes	No	Comment No._____
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3 Legally binding declaration of the prequalifying party

The prequalifying party hereby declares that

- it has received the prequalification documents in their entirety,
- its queries have been answered with sufficient clarity,
- the information and documents it has submitted are correct and in accordance with the truth,
- the data transmitted in the form of data files correspond to the printed data and
- it is fully in agreement with the procedure described in the prequalification documents.

The prequalifying party is aware that

- in the event of successful prequalification, the prequalification documents it has submitted, including data files, will become part of the framework agreement governing the awarding of contracts for the provision of control energy and
- false statements and declarations made knowingly as regards expertise, efficiency and reliability may result in its exclusion from the subsequent tendering and contract awarding procedures as well as the cancellation without notice of any contracts awarded.

With the admission to prequalification, it undertakes to notify swissgrid in writing immediately should any essential changes occur with respect to company or power data which have been provided as a basis for prequalification. It is aware that the incorrectness of the above declarations may lead to its company's exclusion from the future tendering and contract award procedures and result in the cancellation without notice, with good cause, of any existing framework agreement.

Signature

Location

Name:

Date

Name: