Remarks and suggestions in response to the public consultation of the terms and conditions for voltage service providers

In this note, Belgian Offshore platform responds to the public consultation of the terms and conditions for voltage service (T&C VSP) providers as launched by Elia on January 27th of 2020.

BOP remains at disposal for further questions and clarifications when deemed necessary.

General remarks

It is unclear to BOP to what extent and in which situations its members are obligated to offer voltage control services. Relevant parameters can be found in the Federal Grid Code (art. 65), and in the individual members' original detail studies and Access Contracts. Article II.4.3 (and Annex 1) of the T&Cs allow the VSP to indicate its technical control band in both injection mode and compensator mode.

However Elia has communicated to the BOP that its members are not obliged to offer voltage services when the windfarm is in compensator mode. BOP fully agrees on this. Could Elia please guide us to the legal substantiation. Could Elia please also confirm BOP's understanding that its members will be free to define their technical control band, as part of the tender procedure.

Specific remarks

Art. II.3.3 a-b + Annex 13c

Positive and important that the Service Measurement Point may also be a point located downstream from the Access Point.

II.3.1

15 working days is too short to make corrections. Please increase to 45 working days to allow for technical modifications to take place. Especially for offshore modifications, amongst other reasons, weather downtime has to be taken into account.

II.3.3

Within the black box: "*Elia requires a service to be delivered at the high voltage side of the step-up transformer associated to the access point of a grid user to the Elia Grid or the Interconnection Point of the DSO.*"

The step-up transformer is offshore connected by a submarine export cable which means the only reference for an offshore windfarm can be the connection point at the Elia side of the export cable (onshore or offshore).

II.5.6 / Annex 3

"Once the volume of Reactive Power desired by Elia is attained by the Technical Unit, the latter may no longer change its Setpoint and only the automatic regulator may change the injected or absorbed Reactive Power, until Elia sends a new Setpoint."

If a manual setpoint is reached, does Elia check whether the volume of the Qreq_control, as measured at the Service Measurement Point, is within the limits of the tolerance (as described in Annex 3), for at least two successive 30 second measurements?

To ensure that Elia can verify if the volume of the Qreq_control is within the limits of the tolerances (i.e. to avoid the reactive power exchange to change due to a changing grid voltage during the verification period), a manual setpoint needs to be maintained for 1 min 30 seconds before re-activating the automatic voltage control.

II.5.8 / Annex 2

Art. II.5.8: "*Once a Technical Unit has been restarted and is injecting Active Power above its minimum Active Power threshold, irrespective of the last Setpoint sent by Elia, it is agreed that the Technical Unit shall supply the Automatic Control Service Type based on the Setpoint set in Annex 1*."

Annex 2: "*Vstartup is the average Grid Voltage value of the quarter hour during which the unit started up for the last time (meaning the last moment in time where the Technical Unit's active power injection value exceeded its Pmin value as agreed in Annex 1).* "

For PPMs that can seamlessly operate between Group 1 (injection mode) and Group 2 (compensator mode), does the Setpoint need to be reset to the Reference Setpoint every time it crosses between Group 1 and Group 2 or can the setpoint be maintained?

As tying this reset of the setpoint to the minimum active power (i.e. 0 MW), it is correlated to the wind speed for all offshore wind PPM's. This might trigger a sudden large shift in reactive power exchange which might not be desired.

II.6.7

"*Any restriction (forecasted or not) in the reactive power control capability is to be communicated via telephone and email by and between the contact persons identified in Annex 10 as soon as possible.* "

The connection requirements for offshore wind farms allow in case of non-availability of units (due to failure or maintenance) that the reactive power capability might be adjusted based on the current Available Generation Capacity P_{av} instead of P_{nom}.

As the amount of turbines available and therefore the reactive power capability can fluctuate a lot, can this information be shared automatically in the interface used for setpoint exchanges (revolt)? The communication flow from wind parks to Elia (e.g. in terms of turbines in maintenance, …) is to be finetuned.

II.6.8

"In the event of technical problems with electronic data interchange, the Parties shall use telephone communications as a back-up solution."

Note that the conditions and response times applicable in Automatic service delivery mode in this case are not feasible to comply with and will switch to manual control service type.

II.7.1 e)

"*In any case, Grid Voltage according to which regulation is performed is measured at the high-voltage side of the step-up transformer of the Access Point according to modalities of Art. II.6."*

For offshore wind farm connected with a long submarine export cable at the Access Point, it is assumed the Grid Voltage is considered at the Access Point side (Elia side) of the export cable and not at the high-voltage side of the step-up transformer.

II.8.1

"Following article 12 quinquies of the Electricity Law of 29 April 1999, prices can be fixed by means of Royal Decree. In such an event, prices fixed by the Royal Decree become applicable and prevail over prices fixed according to Annex 12."

Electriciteitswet art. 12 quinquies
... Indien het verslag van de commissie vaststelt dat de prijzen manifest onredelijk zijn of op vraag van de netbeheerder, kan de Koning, na advies van de commissie en op voorstel van de minister, met het oog op de bevoorradingszekerheid, bij dwingende beslissing een openbare dienstverplichting opleggen die het volume en de prijzen van de ondersteunende diensten dekken van de producenten in de Belgische regelzone. De commissie houdt rekening met deze beslissing voor de goedkeuring van de tarieven van de netbeheerders...

BOP is concerned about the financial impact and general uncertainty this introduces. Windfarm will incur certain fixed costs, not in the least the IT set-up to be able to provide the requested service, and are not guaranteed that, once their offer is selected, these costs will be reimbursed. There is a risk that the imposed volume requires additional technical adaptations which might not be compensated by the fixed prices, as well as a risk that the fixed prices/volumes do not consider the circumstances and restrictions of offshore installations.

Given the newly introduced mandatory participation to the VSP services, it can be expected that the resulting tender prices will be competitive. There is thus no longer a need for such measure.

BOP would like to request that either this principle is abandoned, through a change in the Electricity Law, or that the tenderer has the right to refuse offering the service in case the prices and/or volume fixed by the Royal Decree are unacceptable.

II.8.2.

It was always the BOP's understanding that the remuneration for the service would consist of a fixed price component and a variable price component. The former would cover initial costs (including, but not limited to the IT investments required to offer the service) and be paid at the initiation of the contract, whereas the latter would cover the variable costs based on the quantity actually offered, paid on a monthly basis.

The wording of this clause does however not seem to provide for a fixed price component.

II.8.3

"The VSP shall hold a bilateral agreement with the Access Contract Holder, acknowledging and accepting the modalities of Service delivery and the interractions between the Service and the application of the tariffs as per modalities described in Elia's tariff proposal. In particular this bilateral agreement takes into account the fact that Q_{req_rem} will be also applied to calculate the tariff for the offtake or injection of additional reactive energy, as per modalities mentioned in Elia's tariff proposal."

BOP understands that the impact of the service on the tariff for "power put at disposal for consumption" and "injection or absorption of additional reactive power" is subject of the bilateral agreement between the VSP and the Access Contract Holder. However the Elia's approved tariffs for 2020-2023 only provide for a correction for the "injection/absorption of additional reactive energy" and not the "power put at disposal" that might need to be adapted as a result of the VSP services. This creates a needlessly complex contractual relationship between the VSP and the Access Contract Holder, which could have easily been avoided by offered all the relevant corrections in the tariffs.

The VSP and the ACH must now agree on if/when to increase the "power put at disposal". Note that this can only happen once a year, and thus presents a substantial fixed cost for at least 12 months. In combination with art. II.8.1 that introduces legal uncertainty of whether the winning tender will

receive its offered prices, and art. II.8.2 that does not seem to provide for a fixed component in the remuneration, BOP is of the opinion that Elia's choice to not correct this in the tariffs, introduces unnecessary risks. In the future this should be adapted in the tariff structure.

In the meantime, BOP proposes to make changes to the relevant contracts (e.g. the Access Contract) to increase the flexibility in the currently rigid regime. Furthermore, BOP asks a guarantee that the financial impact of the mandatory VSP services will be mitigated under all circumstances, also when a RD applies.

Annex 1 / Annex 12

For offshore wind farms, the Qtech_min and Qtech_max may depend on the actual active power production. The shape of the technical control band is therefore not rectangular. For example, at high active power production the reactive capability may be reduced compared to lower active power production levels. How does this need to be considered? The BOP proposes that in addition to the minimum threshold to be able to supply the Group 1 technical band, a maximum active power threshold is added.

It is assumed the Group 1 and Group 2 technical control band can be defined independently of each other even in case both are related to the same Technical Unit.