

## Feedback in response to the public consultation on voltage service and reactive power control review (CREG incentive 2023)

BOP would like to make some suggestions and provide feedback in response to the public consultation of the voltage service and reactive power control review as launched by Elia on 28<sup>th</sup> of September.

### General remark

Offshore wind farms are today not correctly remunerated for the mandatory Mvar services they provide to Elia. The use of a tender procedure suggests that all (mandatory) participants are correctly remunerated in accordance with a price they offer in a competitive procedure. In practice, however, the cost-based prices submitted by the offshore wind parks are year after year rejected by the regulator and the prices for the Mvar services are enforced by royal decree. These enforced prices do not cover for all investment and operational costs of the offshore wind parks.

As long as a proper remuneration for the Mvar services is not provided to the offshore wind parks, covering all investment and operational costs, a penalty system cannot be justified and is to be removed from the service design.

### Tender procedure

It would be useful to review the current tender procedure and propose some improvements in this service update study. For the offshore wind parks, which are obliged to participate, the procedure is perceived as an administrative burden, especially considering the prices are in the end set by royal decree.

Some suggestions for improvement:

- Improve the procedure to minimize the time between submission of the bids (in June) and decision on the final prices (in December);
- The final decision of the service is currently too late (a few days or weeks prior to the start of delivery in the new calendar year) for both technical and financial reasons. Budget forecasts and decisions within companies are typically made in September or October. From a technical standpoint, if an (offshore) unit is not selected for year Y, this would require certain changes to the asset steering set-up. We therefore suggest to improve the procedure to be able to obtain decisions in September for the delivery in the next year. If the decision is made after September, units that are not selected should be offered a 'grace period' of 1 months (January) in which they can still deliver the service at the prices of Y-1 until they are able to return to a MVAR=0 control setup;
- Tender administration can be simplified, for instance: units with mandatory participation can be automatically prequalified, based on the evaluation of the previous year(s), if no significant technical changes to the units are reported;
- A service contract for multiple years could be offered, for instance a 2 or 3 year contract with prices to be inflated or determined based on a predefined formula in the contract.
- In case there is sufficient competition at a certain location/region in the grid (i.e. sufficient amount of reactive power offered compared to the reactive power needed at the location), there is sufficient price competitiveness, and prices automatically converge to reasonable levels. In that case the reasonability analysis by the regulator can be avoided and the procedure can be simplified by avoiding the publication of royal decrees. KPIs per location

can be developed (and made public) to determine the required level of competition per location or region.

### Activation control

Assuming a correct remuneration for the Mvar service, we support the concept of a continuous activation control, especially if the outcome is continuously communicated to the VSP, as it allows for the VSPs to monitor their own performance during the month of delivery, and intervene proactively.

There are however a few remarks on the changes proposed by Elia:

1. Manual service type:

Elia proposes to consider a value of zero in case the reactive power values of two successive 30" Reactive Power measurements in the timestep (quarter hour) of a setpoint request are not within the dead band. Since measurement errors and voltage variability may cause slight deviations in the measured Reactive Power as measured at the connection point, the actual measured Reactive Power of two successive 30" measurements should be considered instead of a zero value.

Furthermore, Elia proposes to only consider the second timestep in case the 5-minute window of setpoint request spans two timesteps. Due to the relatively fast response of offshore wind farms to setpoint requests, this may mean that the initial achievement of the setpoint request is disregarded by Elia. Instead, only the second timestep would be considered, during which the Reactive Power measurements may have already drifted to follow the variability of the voltage. To avoid incorrect assessment of the performance of the VSP, attaining the setpoint within the tolerance band for two consecutive 30" measurements should be evaluated over the entire 5-minute window following a setpoint request, regardless if this window falls within one or two quarter hour timesteps.

2. Automatic service type:

For the avoidance of doubt since it is not mentioned in the consultation report, it is assumed the  $V_{\text{startup}}$  and  $Q_{\text{initial}}$  will still be recalibrated daily at midnight. This is crucial to avoid a potential drift in the Elia and VSP automatic service measurements which could lead to a misalignment in the expected performance.

### Penalties

The penalty system is to be conditional to a correct remuneration for the Mvar services. Without a full compensation of all investment and operational costs, a penalty system cannot be justified and is to be removed from the service design.

The intention cannot be however, to make the penalty more severe, which is why we have a few remarks:

1. To avoid double penalization, quarter hours for which penalization also occurs via the access tariffs, should be excluded from the continuous activation control. This was the case in the original design, and should be kept. Alternatively, the penalization of MVAR in the access tariffs, for units that partake in the automatic VSP services, could be abolished.

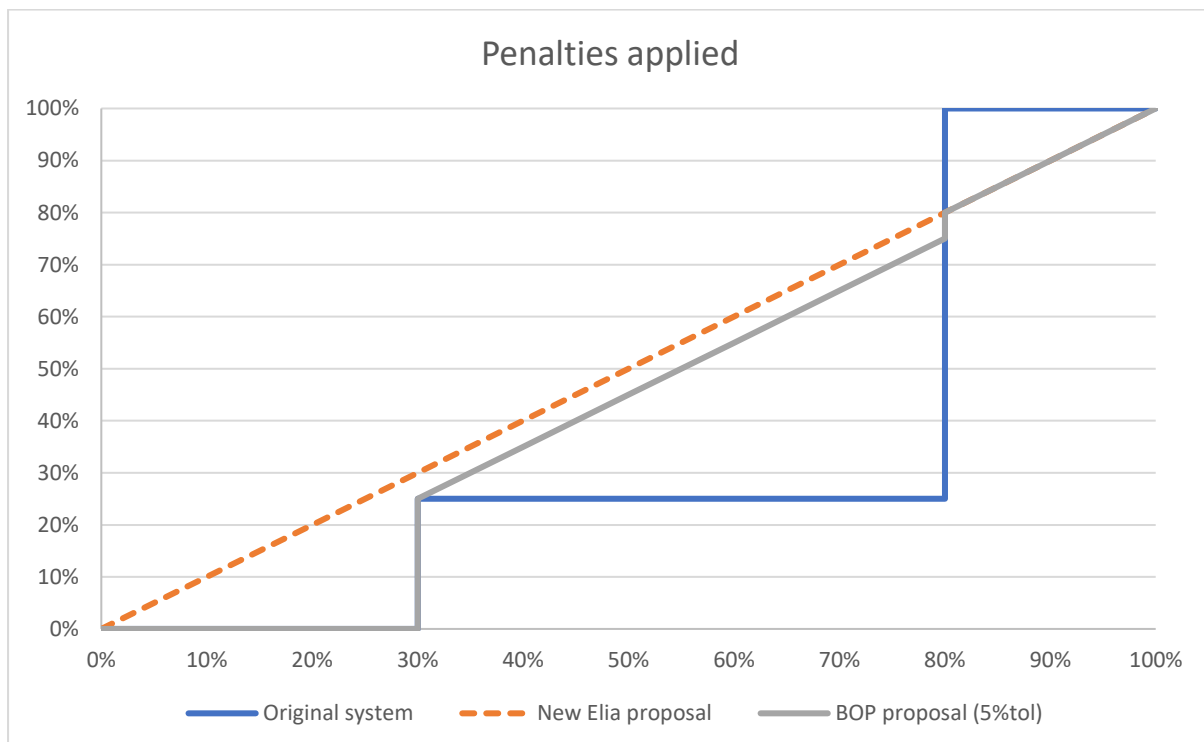
2. As mentioned above, measurement differences can be an important reason for failed quarter hours. Remuneration and penalty calculations are done by Elia based on their energy meters at the connection point. However, voltage and reactive control on wind farms is done by a park controller, owned by the offshore windfarms and using internal (accurate) measurements. Regardless of the proposed penalty mechanism, we request a possibility to take into account possible offsets between Elia and windfarm measurements and the accuracy of the different meters for the calculation of the failed quarter hours and its tolerance.

### 3. Proposal 1:

We don't see a reason as to why the 30% tolerance for 'non-compliant QH' in the original design (as no penalty was due as long as  $Q_{\text{failed}} < 30\%$ ), was reduced to 5% in the workshop in June 2023 and has been completely removed in this consultation. Since Elia does not allow a direct measurement at the connection point for offshore wind farms, offshore wind VSPs need to estimate their control at the connection point from a measurement point located multiple kilometers away. This reduces the accuracy of the regulation, which would lead to an unfair penalization of offshore wind VSPs with the elimination of the threshold. Instead we propose the following:

Q_failed	Penalty
0-30%	0%
30%-80%	$Q_{\text{failed}} - \text{tolerance}\%$ (If the tolerance is 5%, the starting penalty would thus be 25%, similar to the original system, but it increases pro rata your $Q_{\text{failed}}$ )
80%-100%	$Q_{\text{failed}}$ (no more tolerance in this 3 <sup>rd</sup> band)

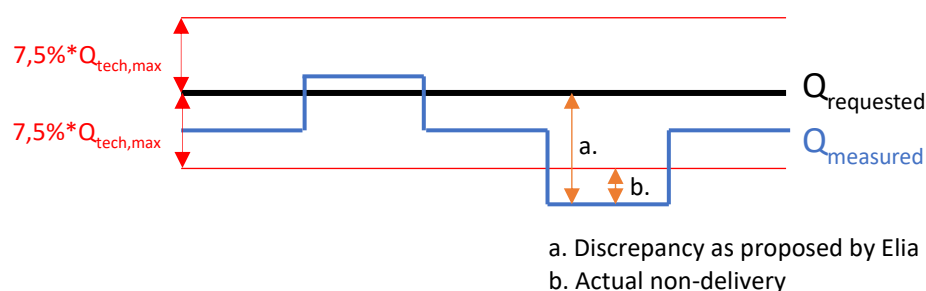
This proposal keeps the thresholds of the original system (at 30%), but the penalty in the middle band (30-80%) will move pro rata the  $Q_{\text{failed}}$ , thus will always be higher than in the original proposal (with a tolerance of 5%). This pro rata movement provides incentives to the VSP to continuously improve its performance, in contrast to the original system where the VSP sees no difference between a  $Q_{\text{failed}}$  of 31% or one of 79%.



#### 4. Proposal 2:

The discrepancy as proposed by Elia in proposal 2 is defined as the delta between  $Q_{\text{requested}}$  and  $Q_{\text{measured}}$ , which disregards the tolerance band of 7,5% described in section 4.1.2 of the consultation (see a. in the figure below). Since operation within the tolerance band is compliant, any penalty should only be calculated from the edge of the tolerance band around  $Q_{\text{requested}}$  and not from  $Q_{\text{requested}}$  itself (see b. in the figure below). This to account for the contractual performance requirements, and the technical measurement differences which have been highlighted above.

Based on an analysis, it is however observed that even with the proposed modifications and in part due to the high penalty factor of 1.5, proposal 2 would result in disproportionate penalties compared to the revenues in cases of temporary non-delivery of the service and cannot be supported by BOP.



#### Communication

Please provide some more clarification on the “grace periods” (exemption from the penalties as per T&C) in case you cannot deliver the service, for instance due to a forced outage. For offshore windfarms, a ‘forced outage’ cannot simply be deduced from the power output; as OMW can occur due to a forced outage or due to a lack of wind. The communication procedure for scheduled or unscheduled unavailability of an asset or the voltage service is unclear. Currently, unavailability declarations happen via e-mail. An availability declaration via a communication protocol will result in extra setup costs. For the avoidance of doubt, a scheduled voltage service unavailability that is communicated 24 hours in advance has to be excluded from the penalty calculation.

An update of the communication protocol from the existing XML based ReVolt interface to a different communication protocol will result in additional one-time investment costs for VSPs. It is suggested that these investment costs are recuperated in a one-time compensation. This to avoid that these investment costs need to be recuperated through the activation prices, since this will lead to an inflation of the activation prices due to the inherent volume risk.

#### An indication of the need for MVAR service

An indication of the need for Mvar services can only be welcomed to better estimate the number of activations expected in an area. However, to estimate the overall service provision the three provided levels of low, medium and high need would not provide much actionable insights to market parties. Instead, this information should be supplemented with the expected distribution within the technical band for both manual and automatic control (e.g. expressed in percentage of technical band) and separated respectively for the production and absorption of reactive power, and in injection mode and compensator mode.

### Price setting

We are in favour of further investigating a design with price formulas which can be proposed by the VSP during submission of the bids for several reasons:

- (i) it might simplify the procedure, as the VSP takes less risk on the time between submitting the bid and the time of contract award,
- (ii) it might allow for multiple year contracts,
- (iii) it might allow for prices to vary within the year (f.i. monthly) to better mirror the costs structures related to the service.

This proposal further develops the proposed new market design by Elia and might require less frequent tenders (i.e. not annually). Since the operational costs when providing the service are directly linked to the market price, the preference goes to prices varying within the year (so the Epex spot can be used as reference), instead of fixing the prices prior to the start of the year (f.i. by averaging the futures prices, as proposed in the consultation).

While the proposed market design by Elia indicates the price bands will be maintained, it is suggested that the pricing of the lower and upper price bands are decoupled. In case of operation in price bracket P2, the full volume should be compensated at the Price 2 instead of at Price 1 for the volume up to Q1 and the remainder at Price 2 as is the case in today's market design. As demonstrated by various wind farms in data supplied to the CREG, this decoupling of the price brackets would allow for price formula's which better mirror the actual costs structure to provide the service.

### Compensator mode

We welcome the introduction of the additional band for compensator mode. While the proposal refers to batteries, also (offshore) wind farms when producing close to or below the Designed Minimum Operating Level (DMOL) on wind farm level are in fact operating in compensator mode on (at least) several wind turbines.

Since the operational costs for providing the voltage services do not solely depend on the Reactive Power exchange, but also on the active power, the introduction of this additional compensator mode band will allow wind farms to reflect the actual cost structure of the service more accurately in the VSP tender submission.

### Cost

Elia proposes to provide units without an obligation to participate the possibility to recover the investment costs via the Mvar service tender procedure. We would argue that all service providers would be allowed to recover the additional investment costs needed in case Elia implements changes such as the communication standards to the Terms and Conditions of the VSP.