

Minutes of Meeting Task Force PEZ 19/10/2023

List of participants

Name	First name	Company/association
Achten	Leander	Storm
Badrzadeh	Babak	Aurecon
Beghin	Véronique	Elia
Bronckart	Olivier	Elia
Buedts	Nico	Jan De Nul
Chaouachi	Aymen	Elia
Cornelis	Natalie	CREG
Crabs	Bérénice	Belgian Offshore Platform
De Kerf	Laurent	Elia
De Schryver	Christophe	Norther
De Vos	Kristof	Elia
De Winter	Christophe	Otary
de Changy	Maxime	Fluxys
Debacker	Beatrice	Engie
Donnay	Loïc	Engie
Genêt	Benjamin	Elia
Guerra	Jean-Luc	Hitachi Energy
Hahati	Bilal	Elia
Hendrix	Stijn	Parkwind
Harlem	Steven	Luminus
Hochet	Matthieu	EDF Renouvelables
Impens	Tomas	Elia
Martens	Pierre	Orsted
Mathy	Aline	Elia
Poitrimolt	Simon	EDF Renouvelables
Reichling	Alain	GE Vernova
Rietjens	Damien	Elia
Rogissart	Simon	FOD Economie

Saidi Mazarou	Nordine	Ocean Winds
Szczepanski	Christian	Elia
Schyvens	Tim	Elia
Smismans	Luc	Parkwind
Steensels	Marc	Otary
Stroobandt	An	Cabinet Federal Minister Energy
Trappeniers	Tom	Elia
Van Den Broucke	Thomas	Elia
Van Bossuyt	Michaël	Febeliec
Verwilghen	Davy	Elia
Vandermeersch	Elise	Elia
Van Der Biest	Piet	Siemens Energy
Van Nuffel	Margot	Otary
Vanden Haute	Cedric	Elicio
Vergote	Viktor	Luminus
Verreydt	Eric	BASF
Victor	Luc	Storm
Vleeschouwers	Stefaan	Hitachi Energy
Waignier	Jean-François	Febeg
Watthé	Gummar	DEME Group
Willems	Tom	Seacoop

Agenda Task Force Princess Elisabeth 19th of October

13:00-13:30	Introduction on public consultation <ul style="list-style-type: none">• Scope of the public consultation• Planning foreseen
13:30-14:30	Connection requirements <ul style="list-style-type: none">• Cable routing/pull-in• Marine and works coordination• Flexible connection contract until realization of Boucle du Hainaut
14:30-15:30	Balancing <ul style="list-style-type: none">• Feedback on open points and conclusions
Break	
16:00-18:00	Dynamic and Harmonic <ul style="list-style-type: none">• Forced oscillation update• Voltage control update• Conformity process

The meeting was chaired by Benjamin Genêt. All agenda items were supported with material prepared by Elia. The slides serve as background for these minutes and can be found on the Elia website in the Task Force Princess Elisabeth Webpage: <https://www.elia.be/en/users-group/task-force-princess-elisabeth-zone>

Minutes of Meeting

Elia (Benjamin Genêt) welcomes all physical and virtual participants to this Task Force Princess Elisabeth Zone (TF PEZ).

Introduction on public consultation TF PEZ

- **Scope of the public consultation**

Elia (Bilal Hahati) introduces the presentation of the public consultation with a summary of the scope and an overview of the planning.

- **Planning foreseen**

The public consultation will begin on 20th November 2023 and end on 22nd January 2024. After the public consultation, a Task Force PEZ will be planned around end of April and a publication of Elia answer of this public consultation

Connection requirements

Elia (Davy Verwilghen) introduces the connection requirements for Princess Elisabeth Island (PEI), offering insights into the prospective layout of the island and the single line diagram.

Otary (Marc Steensels) asks about the accessibility of the final single line diagram during the public consultation. Elia (Davy Verwilghen) confirms that it will indeed be accessible at that time.

Parkwind (Stijn Hendrix) asks about the feasibility of using the corridor between parcels 2 and 3 (highlighted in blue and yellow on slide 12) for increased flexibility. Elia (Thomas Impens) clarifies that the space is designated for future expansion and must remain unoccupied.

Parkwind (Stijn Hendrix) asks whether the drawing for parcel 1 would be included in the public consultation, to which Thomas Impens confirms.

Otary (Marc Steensels) raises concerns about the design criteria for cable pulling, including forces and J-tube diameter. Elia (Thomas Impens) clarifies that the diameter adheres to industry practices and DNV guidelines.

Engie (Loïc Donnay) asks about the distance of the scour protection from the island. Elia (Thomas Impens) replies it is up to 50 meters but also remarks the scour protection will not be uniform around the island.

Parkwind (Stijn Hendrix) asks if the water used to fill the cell is pumped, circulating or stationary water. Elia (Thomas Impens) replies that the cells contains sea water and rain water. The design is still ongoing, the final details are still subject to change.

Otary (Marc Steensels) asks if sufficient interface data will be available in the public consultation (i.e. for fiber optic connections, split/jointing area, etc.). Elia (Thomas Impens) replies that Elia will do their best to include as much information on the design as possible.

Otary (Marc Steensels) asks whether more details about the vertical parts in the hang off room are available and if it is considered a confined space or not, and asks more information about the jointing area, earthing cable, earthing connections. Elia (Thomas Impens) replies the design of the hang off room is still ongoing. But all the details and instructions (where to drill for example) will be foreseen in the future.

Engie (Loïc Donnay) asks if the fact that contractors operating heavy machinery on the island, in between high voltage equipment, meters of cables etc. may cause coordination risks. Elia (Thomas Impens) replies that the cables in the drainage buffer zone, where the concrete lids are closed, are protected.

Two points are emphasized by Elia (Benjamin Gênet):

First one is that some decisions in the design have been taken already and cannot be changed anymore. That was required to ensure a timely delivery of the infrastructure and the decisions were based as much as possible on the discussions in the TF. These designs will be shared during the public consultation for full awareness but will not be open for changes.

The second point is that Elia aims to provide the information that are needed for the wind farms to build their business case in preparation to the tender, and striking a balance between the appropriate level of information now and what can be defined later. It's the ambition of Elia to provide the relevant information to be able to bid in an appropriate and efficient way into the tender.

- **Flexible connection contract until realization of Boucle du Hainaut**

Elia (Damien Rietjens) presents the chapter about the flexible connection contract until realization of Boucle du Hainaut.

Otary (Margot Van Nuffel) asks what the percentage is and whether there is a maximum activation volume guaranteed. Elia (Damien Rietjens) replies that in line with what is done with all other customers, this percentage is not guaranteed. Elia will give an indicative number.

Otary (Margot Van Nuffel) asks if Nautilus will also be built on a flex contract. Elia (Benjamin Gênet) replies that Nautilus will be subject to capacity calculation and hence does not have a permanent guaranteed capacity.

Otary (Marc Steensels) asks what is the compensation measures foreseen. Elia (Benjamin Gênet) replies that the framework for flexible contract does not enable a compensation for delayed project (e.g. due to permitting issue).

Febeliec (Michaël Van Bossuyt) says that a preferential treatment in terms of connection for the offshore developers would be unacceptable.

Otary (Margot Van Nuffel) remarks that the CfD is not a solution for the curtailing caused by congestion due to the exposure to imbalance prices, and it might actually increase their risk.

Balancing

- **Feedback on open points and final conclusions for recommendation**

Elia (Benjamin Genêt) opens the topic on balancing by saying the ambition of today is to recap the conclusions of the balancing stream and to answer the remaining open points arising/ from previous discussions.

Elia (Kristof De Vos) brings a recap on the final recommendations on the mitigation measures. He gives an overview of the context and history of the integration study, starting from the initiation in 2019 to the conclusions and recommendations Elia has today. He further explains the justification of the recommended mitigation measures.

Otary (Christophe De Winter and Margot Van Nuffel) do not agree with that the proposed mitigation measures are necessarily fair in view of cost allocation. It implies a choice to pass the cost to the wind parks while alternatives could be considered as well. Elia reiterates that the mitigation measures put forward are much cheaper than solutions based on procuring additional balancing capacity. The activation can even be avoided under good performance of the market and if the measure is triggered, it even helps the BRPs in many cases to avoid an expensive excess or shortage imbalance.

Parkwind (Stijn Hendrix) wants to highlight that in the situation today, it is a sellers' market when it comes to turbines. So whatever mitigations are proposed, they should be checked thoroughly with the turbine suppliers upfront to make sure they can technically support them. Elia (Kristof De Vos) reminds that the most specific requirement, the High Wind Speed capabilities, has been discussed with stakeholders during the previous study, as well when presenting the assumptions of this study to the task force. Bilateral contacts with manufacturers did not reveal any issues while Elia notices that the last offshore wind parks installed in Belgium already demonstrate these capabilities.

Luminus (Victor Vergote) asks if the triggers for the ramp rate limitation will be communicated to all offshore players in the zone, or if Elia will determine which player needs to be activated. Elia (Kristof De Vos) clarifies that the measure will be applied to all new offshore wind parks, and the existing ones which have voluntarily chosen to adopt the ramp rate limitations measure. The total ramp of the fleet shall be limited to 15 MW / min. This trigger will be imposed on individual farms pro-rata to the installed capacity compared to the newly installed offshore capacity. In view of the foreseen 3.5 GW, this means that a park of 350 MW would face a limitation of 1.5 MW/min.

Engie (Loïc Donnay) asks if for the preventive curtailment, this will also be allocated pro rata? Elia (Kristof De Vos) confirms that the curtailed volumes will be allocated to the affected BRPs pro rata to their contribution in the shortage risk.

Otary (Margot Van Nuffel) wonders if the products on the reserve market for mFRR bids are fast enough to react in a case of fast ramp down when the storm hits to avoid activation of the measure. Elia (Kristof De Vos) explains that preventive curtailment is not only necessarily for the very fast part of the storm, but it is about covering the potential system imbalance during the entire duration of the storm, which could lead to a large imbalance in the system. Elia also clarifies that it considers aFRR and mFRR, where aFRR has a much faster reaction time. But indeed, system simulations indicate that remaining alert state situations remain under worst market performance conditions, even under high available balancing energy. This can be covered by means of triggering the preventive curtailment in case the market is not taking measures by itself.

Regarding the preventive cap, Luminus (Victor Vergote) asks for an estimation how often this situation would occur. Elia (Kristof De Vos) replies it depends mainly on the expected direction of the flow on the interconnector as it is triggered during positive (excess) imbalances during full export conditions from the Princess Elisabeth Island to the Belgian onshore system. Elia notes that balancing cooperations with the connected region, in this case UK, or later DK, will reduce the activation frequency and duration of the measure.

Parkwind (Stijn Hendrix) asks if the cable is the bottleneck and not the converter stations? Elia (Benjamin Genêt) replies that it is the converter and it is about milli-second reaction. Overloading is not an option in an HVDC system due to the converter.

Luminus (Victor Vergote) asks the intentions from Elia's point of view and how will be proceeded and if it is a priority to find an agreement with the UK first. Elia (Kristof De Vos) explains the preventive cap will be needed anyhow. Even if there is an operational agreement, a backup is needed in case export to the UK is not possible.

As a next topic, Implications of ATC limitations in the balancing timeframe was explained by Elia (Kristof De Vos), followed by imbalance price design in an Offshore Bidding zone.

The presentation is concluded with a section on the financial impact of the mitigation measures put forward by Elia.

Dynamic & Harmonic

Elia (Olivier Bronckart) has presented the topic of Dynamic & Harmonic.

- **Forced oscillation update**

Otary (Christophe De Winter) asks if it is Elia's intention to define the limits in the Belgian context to the default values presented for forced oscillation. Elia (Olivier Bronckart) confirms that, for the tender, the default values will indeed be the reference.

Otary (Christophe De Winter) asks if it is Elia's intention to impose stricter requirements for future wind parks. Elia (Olivier Bronckart) confirms that is not the intention at this moment.

Otary (Christophe De Winter) mentions that they noticed there is portfolio effect on the windfarms they own. So the forced active power oscillations for the park is lower than the sum of the active

power oscillations for each turbine, and it also depends on where you measure. Elia (Damien Rietjens) explained that the sum of all oscillations will be added up to one access point. This will be further clarified in the consultation document.

Parkwind (Stijn Hendrix) asks if that applies to all compliance topics. So all compliance requirements apply on wind farm level and not on string level, as this is not highlighted or made clear in the slide. Elia (Benjamin Genêt) confirms the topic of which level is applicable will be described in detail and made clear in the public consultation.

Otary (Marc Steensels) added a remark about the text saying that new parks should be able to reproduce at least similar performance. But different sizes of turbines, different site conditions, and bigger turbines than built in MOG1 are expected. Elia (Olivier Bronckart) replies that a percentage of oscillation amplitude will be extended or increased according to the size of the turbine. It's not an absolute value, but a relative value to the size of the wind turbine. Elia (Benjamin Genêt) adds that these requirements have also been discussed with manufacturers and they did not see them as excessive and should be possible to reach according to them.

- **Voltage control update**

Elia (Olivier Bronckart) continued with the presentation on the Voltage control with updates and conclusions.

Parkwind (Stijn Hendrix) asks to clarify the points on the Q-V capability curve on slide 62, since there is no value on the axis. Elia (Olivier Bronckart) replies that the values next to the curves will be added in the public consultation document.

Parkwind (Stijn Hendrix) also remarks the maximum length considered (25km) may be too short, seen that a straight line would already measure up to 21 km. Elia (Olivier Bronckart) elaborates that as the assessment is done from the access point for the entire wind farm, then shorter strings may compensate for longer ones. He asks to provide the input in the public consultation and based on that Elia can check again if a significant impact is seen and can be compensated by difference in length, to make sure nothing unrealistic is asked.

- **Conformity process**

Elia (Olivier Bronckart) continued with the third topic, the conformity process.

Parkwind (Stijn Hendrix) says from a supply chain perspective, they are really looking into harmonized requirements, harmonized compliance processes but imposing requirements that deviate from the norm in the market may put a heavy strain on the supply chain with negative consequences on the competitiveness. Elia (Olivier Bronckart) answers that it anticipates that such requirements will become more and more common. It will take time to harmonize everything, but Elia has to find solutions to ensure the timely delivery of the infrastructure.

Parkwind (Stijn Hendrix) notes there is a difference between slide 74 where there is mentioned that the asset owner should take full responsibility and the cost for a period of five years and slide 75

mentions 'best efforts'. The expectations should be made more clear. Elia (Benjamin Genêt) confirms that the conditions will be clarified in the consultation document.

AOB and closure

Otary (Marc Steensels) asks a question about the entire communication architecture. This information is missing today and would be good to have it available by the consultation or maybe at the workshop afterwards. Elia (Davy Verwilghen) confirms the general concept will be available with the public consultation.

Elia (Benjamin Genêt) concludes the topic by stating as much details as possible will be put in the public consultation, but some details may still be missing. If these details are crucial and business case sensitive, they should be flagged so the right focus can be added to the right issue. At the next Task Force after the consultation, Elia will aim to provide the necessary information.

Elia (Benjamin Genêt) thanks all participants for participation and closes the Task Force PEZ.