

Specification and contents of the proposed amendments to the Decision on Environmental Conditions No. 14/2021 of 30 November 2021 issued by the Regional Director for Environmental Protection in Szczecin:

1. **Clause B.I.1.1.c) to be deleted.** Pursuant to Art. 6, paragraph 1 of the Regulation of the Council of Ministers of 8 August 2017 *on the organisation and methods of controlling the hazards and pollution at sea* (consolidated text, Journal of Laws 2022, item 216), the combating of pollution in Polish sea areas is carried out with the use of mechanical methods, while the application of any other methods requires the consent of the competent director of the maritime office (paragraph 2). The content of the administrative decision cannot duplicate any generally applicable regulations, and the addressee of the decision, regardless of the content of the clause in question, is absolutely bound by the content of generally applicable regulations, including those determining the manner of combating pollution in sea areas. The provision discussed does not introduce or modify any obligation, which, in the case of deleting this provision, the Investor executing the Investment will be forced to implement and observe.

The amendment is of a legal and editorial nature, does not affect the transboundary assessment considerations or generate transboundary impacts.

2. **Clause B.I.1.1.e) to be deleted.** Pursuant to the requirements contained in Art. 113b, paragraph 1, item 5 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a "Pollution Response Plan for the Offshore Wind Farm and its Set of Devices". The detailed requirements for this document are set out in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the rescue plan and the pollution response plan for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2391). This document requires approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. Consequently, the provision in question is misleading, as it refers to a document that does not exist in the Polish legal order; moreover, the content of the requirements resulting from such a document coincides with those required in the "Pollution Response Plan for the Offshore Wind Farm and its Set of Devices". As the preparation of the latter is required under generally applicable law, it seems needless to repeat the requirements directly deriving from generally applicable legal acts in the text of the Decision on Environmental Conditions.

The amendment is of a legal and editorial nature and does not affect the transboundary assessment considerations or generate transboundary impacts.

3. **Clause B.I.1.1.2 to be deleted.** Pursuant to Art. 113b, paragraph 1, item 4 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a “Pollution Response Plan for the Offshore Wind Farm and its Set of Devices” and a “Rescue Plan”. Detailed requirements for both documents are specified in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the rescue plan and the pollution response plan for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2391). These documents require approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. As the preparation of the latter is required under generally applicable law, it seems needless to repeat the requirements directly deriving from generally applicable legal acts in the text of the Decision on Environmental Conditions.

The amendment is of a legal and editorial nature and does not affect the transboundary assessment considerations or generate transboundary impacts.

4. **Clause B.I.1.1.3 to be deleted.** Pursuant to Art. 113b, paragraph 1, item 1 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a “Navigational Impact Analysis for the Assessment of the Impact of the Offshore Wind Farm and its Set of Devices on the Safety and Efficiency of Vessel Navigation in the Polish Sea Areas”. Detailed requirements for this document are specified in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the navigational impact analysis and technical expert studies for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2380). This document requires approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. As the preparation of the latter is required under generally applicable law, it seems needless to repeat the requirements directly deriving from generally applicable legal acts in the text of the Decision on Environmental Conditions.

The amendment is of a legal and editorial nature, does not affect the transboundary assessment considerations or generate transboundary impacts.

5. **Clause B.I.1.1.5 to be amended** to the following wording: “Do not use strong light from dusk to dawn, including light directed upwards, except when lighting is required to ensure safety or satisfy the requirements of occupational health and safety regulations”. We propose to modify the provision in question in such

a way as to limit the possibility of environmental impact, but at the same time, to ensure working conditions compliant with health and safety requirements for the project contractors and operators. The provisions of the Decision on Environmental Conditions should not prevent the fulfilment of other obligations arising from generally applicable legislation (in this context, concerning the provision of adequate working conditions). The effects of the proposed amendment do not generate transboundary impacts.

This amendment refers to local impacts confined to the original findings of the environmental impact assessment. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

6. **Clause B.I.1.1.11 to be deleted.** Pursuant to the requirements contained in Art. 113b, paragraph 1, item 5 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a “Pollution Response Plan for the Offshore Wind Farm and its Set of Devices” and a “Rescue Plan”. Detailed requirements for both documents are specified in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the rescue plan and the pollution response plan for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2391). These documents require approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. As the preparation of the above-mentioned plans is required under generally applicable law, it seems needless to repeat the requirements directly deriving from generally applicable legal acts in the text of the Decision on Environmental Conditions.

The amendment is of a legal and editorial nature and does not affect the transboundary assessment considerations or generate transboundary impacts.

7. **Clause B.I.1.1.12 to be deleted.** Pursuant to Art. 113b, paragraph 1, item 1 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a “Navigational Impact Analysis for the Assessment of the Impact of the Offshore Wind Farm and its Set of Devices on the Safety and Efficiency of Vessel Navigation in the Polish Sea Areas”. Detailed requirements for this document are specified in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the navigational impact analysis and technical expert studies for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2380). This document requires approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. As the preparation of the navigational impact analysis is required under

generally applicable law, it seems needless to repeat the requirements directly deriving from generally applicable legal acts in the text of the Decision on Environmental Conditions.

The amendment is of a legal and editorial nature, does not affect the transboundary assessment considerations or generate transboundary impacts.

8. **Clause B.I.1.1.13 to be deleted.** Pursuant to the requirements contained in Art. 113b, paragraph 1, item 5 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a “Pollution Response Plan for the Offshore Wind Farm and its Set of Devices” and a “Rescue Plan”. Detailed requirements for both documents are specified in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the rescue plan and the pollution response plan for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2391). These documents require approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. As the preparation of the above-mentioned plans is required under generally applicable law, it seems needless to repeat the requirements directly deriving from generally applicable legal acts in the text of the Decision on Environmental Conditions.

The amendment is of a legal and editorial nature, does not affect the transboundary assessment considerations or generate transboundary impacts.

9. **Clause B.I.2.10 to be deleted.** In the Polish legal order, there are regulations relating to the issue of safety zones. First of all, pursuant to Art. 24 of the Act of 21 March 1991 *on the maritime areas of the Republic of Poland and maritime administration* (consolidated text, Journal of Laws 2023, item 960, as amended), around artificial islands, structures and devices or their complexes, understood as a group of artificial islands, structures or devices located not more than 1000 m apart, as well as cables or pipelines or their groups, the locally competent director of the maritime office will be able to establish, by way of a regulation, safety zones adjusted to the type and purpose of artificial islands, structures and devices or their complexes, as well as cables or pipelines, reaching out not more than 500 m from each point of their external edges, unless a different range of the zone is permitted by generally accepted international standards or recommended by a competent international organisation. Additionally, it should be emphasised that under Art. 113b, paragraph 1, item 1 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a “Navigational Impact Analysis for the Assessment of the Impact of the Offshore Wind Farm and its Set of Devices on the Safety and Efficiency of

Vessel Navigation in the Polish Sea Areas”. Detailed requirements for this document are specified in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the navigational impact analysis and technical expert studies for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2380). This document requires approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. Thus, the director of the maritime office has substantive and legal grounds for determining the conditions for conducting restrictions on the use of the marine space within the boundaries of the offshore wind farm. In practice, the introduction of the provision discussed interferes with the rights and obligations of another body resulting from the generally applicable regulations. Moreover, there are no substantive grounds for taking such decisions whatsoever. For these reasons, this provision should be deleted. In addition, some of the provisions are included in the spatial development plan for the Polish sea areas (Regulation of the Council of Ministers of 14 April 2021 *on the adoption of the Maritime Spatial Development Plan for Internal Sea Waters, Territorial Sea and Exclusive Economic Zone at a scale of 1:200 000* (Journal of Laws of 2021, item 935, as amended) in the description of area 44.E (Appendix 2 – the text of the plan). Therefore, it is needless to repeat the requirements directly resulting from the applicable legal acts in the Decision on Environmental Conditions.

The amendment is of a legal and editorial nature and does not affect the transboundary assessment considerations or generate transboundary impacts.

10. **Clause B.I.2.16 to be deleted.** This clause can be found in the spatial development plan for the Polish sea areas (Regulation of the Council of Ministers of 14 April 2021 *on the adoption of the Maritime Spatial Development Plan for Internal Sea Waters, Territorial Sea and Exclusive Economic Zone at a scale of 1:200 000* (Journal of Laws 2021, item 935, as amended) in the description of area 44.E (Appendix 2 – the text of the plan). Therefore, it is needless to repeat the requirements directly resulting from the applicable legal acts in the Decision on Environmental Conditions.

Based on the analyses conducted in the EIA Report, the amendment in question does not affect the transboundary assessment considerations, or change or generate new transboundary impacts.

11. **Clause B.I.2.17 to be amended** to the following wording:

“To minimise the impact of the Investment during the piling procedure on ichthyofauna, seabirds and marine mammals:

- a) each time when starting a piling operation, it should begin with the “soft start” procedure, which involves making several blows with a smaller blow force and gradually increasing the blow force and, consequently, gradually

increasing the noise intensity. The piling power must increase gradually over a period of several minutes. After this time, the procedure should be continued to drive the pile up to the target depth with standard piling power;

- b) measures should be applied to deter marine mammals along with a marine mammal observation program (MMOs and PAM);
- c) an underwater noise reduction system should be designed and applied (e.g. in the form of bubble curtains, double bubble curtains, AdBM technologies, HSD systems, IQIP-NMS/IHC-NMS, or a combination of the above-mentioned mitigation measures, also in combination with pile driver attachments in the form of PULSE or MNRU systems or other systems showing similar features), which will minimise the underwater noise impact on pinnipeds and porpoises. The underwater noise reduction system should ensure that at a distance of 8 km from the source of sound and within the boundaries of Natura 2000 sites established to protect porpoises and seals (the nearest ones are the Swedish Natura 2000 site Hoburgs bank och Midsjöbankarna SE0330308 located at a distance of approx. 28 km and the Ostoja Słowińska PLH220023 located at a distance of approx. 48 km from the Investment area) the underwater noise generated does not exceed the maximum underwater noise levels: $SEL_{cum} = 140 \text{ dB re } 1 \mu\text{Pa}^2\text{s}$ and weighted with the HF function (the HF weighting function for marine mammals highly sensitive to high-frequency sounds – porpoises) and $SEL_{cum} = 170 \text{ dB re } 1 \mu\text{Pa}^2\text{s}$ and weighted with the PW function (the PW weighting function for pinnipeds – seals). If sound measurements show that the said thresholds are exceeded, pile driving should be stopped. This should be immediately, but no later than within 7 days from the incident occurrence, notified to the locally competent regional director for environmental protection. The procedure can be continued after relevant measures agreed on in writing with the regional director for environmental protection and ensuring that the sound thresholds are not exceeded have been implemented;
- d) the piling procedure within the FEW Baltic II OWF area, consisting in driving foundation piles into the seabed, should be carried out so as to take into account, before the works are commenced, the piling procedures in the areas of other planned OWFs in the immediate vicinity of the Słupsk Bank so that no more than two piling procedures are carried out at the same time.”

We propose to modify the provision in question in order to standardise the reference levels/threshold values in relation to all the provisions of the Decision on Environmental Conditions.

The proposed noise reduction measures, which were also used in the modelling of underwater noise propagation, were selected based on the solutions currently available on the market and knowledge what degree of reduction these systems offer in order to demonstrate that the noise from piling of monopiles can be reduced to a level that does not potentially adversely impact the environment. However, it should be noted at this point

that newer noise mitigation technologies are being developed on the market and when actual construction works begin, it may turn out that there are systems with higher efficiency and lower costs or the system included in the analysis is no longer in use. In such a situation, the investor does not rule out the use of a noise reduction system other than the one included in the noise modelling. During the modelling carried out for the needs of the EIA Report, the near-field mitigation system (NFS) and the double far-field mitigation system (DFFS) were used as mitigation measures, taking into account systems such as IQIP-NMS/IHC-NMS and DBBC. It should be noted here that the names of the systems cited are the proper names of underwater noise reduction systems, often patented and limited to specific contractors. Indicating a specific solution in the decision would make such an approach impossible, but it should be stressed that the investor's objective is not to select any other mitigation system, but a system that will effectively reduce the level of generated sound without causing a potentially significant adverse impact of noise on marine organisms. It should be emphasised at this point that in the case of underwater noise, a specific noise level needs to be maintained, and the type/kind of the mitigation measure used does not directly translate into an impact on vulnerable groups of animals, it is only about reducing and ultimately maintaining a certain level.

The amendment in question does not affect the transboundary assessment considerations, or change or generate new transboundary impacts. The proposed mitigation measures comply with the current practice and meet the expectations related to ensuring an appropriate level of protection expressed in the conducted transboundary impact assessment.

The proposed amendment refers to measures mitigating the impact from the piling procedure in the construction stage on ichthyofauna, seabirds and marine mammals. This impact was taken into account in the conducted transboundary environmental impact assessment, and the proposed amendment meets the expectations reported by the potentially affected parties as part of this assessment.

12. **Clause B.I.2.18 to be amended** to the following wording:

“The construction works for individual stages of WTG installation should be carried out gradually to limit the area of the work performance, i.e. adjoining WTGs should be constructed one by one, starting in one location so that the area gradually becomes built up with the structures. At the same time, sequential work performance is admitted, with a division into the construction stages, i.e. installing in the first place the foundations for all WTGs, followed by the towers of all WTGs, the installation of nacelles and rotors, and so on until all the works are completed.”

The amendment to this provision is to ensure a rational way of carrying out the works, i.e. in accordance with the following sequence of operations: foundation installation -> construction of towers -> installation of nacelles and

rotors. The original provision may suggest that successive neighbouring WTGs need to be constructed, but for different construction stages, both the area occupied during the construction of various parts of WTGs and the construction schedules of various elements of WTGs may differ and require the works to be organised differently.

The effects of the proposed amendment do not generate transboundary impacts. They only have local impacts confined to the findings of the original environmental impact assessment. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

13. **Clause B.I.2.19 to be repealed.** In the FEW Baltic II location area, there occur organisms living at greater depths, and all species of benthic organisms found there are eurythermic, i.e. resistant to temperature changes. The provision which is requested to be revoked was copied from the requirements that the BSH (the German equivalent of the maritime offices) sets for the OWFs in Germany as a precautionary condition and was transferred from the conditions set for the OWFs the connection infrastructures of which pass through the Wadden Sea National Park. In the coastal zone of this nature conservation area, in the areas periodically exposed during low tides, there live a huge number of species of marine organisms, including those sensitive to temperature changes. Such conditions justified the application of the provision discussed. However, it should be noted that the reason for the request to repeal the provision is that in the project in question, we are not dealing with conditions or organisms that would justify maintaining the provision in question. Currently, this issue has been analysed in more detail, also in relation to the basis for establishing this provision in the first place, which is not pertinent to the environmental conditions of the FEW Baltic II, and its application cannot be justified even by precautionary considerations.

The effects of the proposed amendment do not generate transboundary impacts. They are local impacts confined to the original findings of the environmental impact assessment. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

14. **Clause B.I.2.20 to be deleted.** Our experiences to date with rotor tip/blade painting include studies conducted on the island of Smøla in central Norway over 10 years, the results of which confirmed a reduction in collision mortality by 70% on average for painted turbines in the case of the white-tailed eagle (*Haliaeetus albicilla*). However, these are the first studies to confirm the effectiveness of this type of mitigation measure. In laboratory studies (Hodos,

2003¹), the degree of blade blurring was tested using different patterns and colours on one of the blades (the common kestrel was used in the experiment). Of all the patterns, the blade painted uniformly black best reduced the blurring effect of the image perceived by kestrels. At the same time, the experiment with different blade colours produced inconclusive results. The degree of vision blurring was highly dependent on the background image (e.g. forest, blue sky, etc.). None of the known studies have been carried out under offshore conditions, with a specific, homogeneous scenery devoid of features typical of topography on the land. With this in mind, it is debatable which colour would work best at an offshore wind farm to reduce the risk of collision. In addition, the referenced studies were carried out for only one species (not identified so far in any offshore wind farm bird surveys conducted in Polish sea areas). In the case of wind farms located in the offshore zone, there is no reliable information indicating which pattern or colour on rotor blades would be best to minimise the risk of bird collisions. Therefore, available research results on the use of blades painted in different colours cannot be directly transferred to the reality of offshore wind farm operation, including the FEW Baltic II in particular. The aforementioned publication did not cite information on how many birds of individual species flew across the wind farm area, and therefore the results of the mortality study cannot be cross-referenced to the numbers of birds flying in the area and their species. To carry out such a cross-reference, information on the flux of birds flying across the OWF area is needed, so that the data could be compared with the information available for the FEW Baltic II.

According to the results of the latest surveys conducted at the Eemshaven offshore wind farm in the Netherlands (14 WTGs), where half of the WTGs have one blade painted black, the black colour of the blades has no statistically significant influence on reducing the mortality rates for wetland bird species. The surveys were conducted in the BACI (Before-After Control-Impact) system, i.e. a control monitoring program was carried out to analyse mortality rates with no black blades being used, followed by an analysis after their introduction. The surveys are under way, and, due to the high level of bird species variations, the final conclusions will be drawn after the monitoring program is completed. Bearing these arguments in mind, it is recommended that painting one blade black be given up as the effectiveness of this mitigation measure needs to be carefully analysed by way of further research. This mitigation measure may be effective for certain bird species, e.g. predatory birds, and less effective for wetland birds, which primarily migrate over sea areas during the day. Moreover, the authors of these surveys point out that light-coloured blades contribute to a decrease in mortality rates of birds active at night.

Under applicable regulations, black is not authorised for marking air obstacles, and the use of such a colour requires a special permit. Applying for such a permit may significantly delay the implementation of the entire project, contradicting both the interests of the Investor and the public interest. Another

¹ Hodos, W. (2003). Minimization of motion smear: Reducing avian collisions with wind turbines. Period of performance: July 12, 1999-August 31, 2002. (NREL/SR-500-33249). Retrieved from Golden, Colorado, USA. <https://www.nrel.gov/docs/fy03osti/33249.pdf>

risk is that the guarantee issued by the turbine manufacturer may be lost due to interference not foreseen in their specifications by painting one of the rotor blades black and concern about the actual consequences in the form of, among others, uneven wear of the turbine blades threatening serious damage to the turbine. The rules for marking WTGs for aviation safety purposes are set out in §27 of the Regulation of the Minister of Infrastructure of 12 January 2021 *on air traffic obstacles, obstacle limitation surfaces and dangerous devices* (Journal of Laws 2021, item 264). Painting the rotor blades in a manner inconsistent with this provision will result in non-compliance with the generally applicable law. No decision on environmental conditions can impose conditions causing a breach of other generally applicable provisions unless a provision of a legal act offers such a possibility. It should be stressed at this point, that according to the information presented in the environmental impact assessment report for the Baltic Power offshore wind farm investment, the effectiveness of painting the rotor blades black as an element reducing the collision rate for bird species identified for the FEW Baltic II was not confirmed.

The effects of the proposed amendment do not generate transboundary impacts. The impacts are confined to the original findings of the environmental impact assessment. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

15. **Clause B.I.3.3 to be deleted.**

The conditions that vessels must fulfil to be used for shipping or other offshore activities are set out in Art. 6 of the Act of 16 March 1995 *on the prevention of pollution from ships* (consolidated text, Journal of Laws 2023, item 1072). These requirements include complying with the requirements of the MARPOL Convention. Thus, the introduction of the provision in question to the Decision on Environmental Conditions leads to a repetition of the generally applicable provisions and does not introduce any modification of the obligations imposed on the addressee of the decision on environmental conditions anyway. Thereby, this provision is unnecessary and should be deleted from the text of the Decision on Environmental Conditions.

The amendment in question is of a legal and editorial nature and does not affect the transboundary assessment considerations, or change or generate new transboundary impacts.

16. **Clause B.I.3.4 to be deleted.** In the Polish legal order, there are regulations relating to the issue of safety zones. First of all, pursuant to Art. 24 of the Act of 21 March 1991 *on the maritime areas of the Republic of Poland and maritime administration* (consolidated text, Journal of Laws 2023, item 960, as amended), around artificial islands, structures and devices or their complexes, understood as a group of artificial islands, structures or devices located not

more than 1000 m apart, as well as cables or pipelines or their groups, the locally competent director of the maritime office will be able to establish, by way of a regulation, safety zones adjusted to the type and purpose of artificial islands, structures and devices or their complexes, as well as cables or pipelines, reaching out not more than 500 m from each point of their external edges, unless a different range of the zone is permitted by generally accepted international standards or recommended by a competent international organisation. Additionally, it should be emphasised that under Art. 113b, paragraph 1, item 1 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a “Navigational Impact Analysis for the Assessment of the Impact of the Offshore Wind Farm and its Set of Devices on the Safety and Efficiency of Vessel Navigation in the Polish Sea Areas”. Detailed requirements for this document are specified in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the navigational impact analysis and technical expert studies for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2380). This document requires approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. Thus, the director of the maritime office has substantive and legal grounds for determining the conditions for conducting restrictions on the use of the marine space within the boundaries of the offshore wind farm. In practice, the introduction of the provision discussed interferes with the rights and obligations of another body resulting from the generally applicable regulations. Moreover, there are no substantive grounds for taking such decisions whatsoever. For these reasons, this provision should be deleted. In addition, some of the provisions are included in the spatial development plan for the Polish sea areas (Regulation of the Council of Ministers of 14 April 2021 *on the adoption of the Maritime Spatial Development Plan for Internal Sea Waters, Territorial Sea and Exclusive Economic Zone at a scale of 1:200 000* (Journal of Laws of 2021, item 935, as amended) in the description of area 44.E (Appendix 2 – the text of the plan). Therefore, it is needless to repeat the requirements directly resulting from the applicable legal acts in the Decision on Environmental Conditions.

The amendment in question is of a legal and editorial nature and does not affect the transboundary assessment considerations, or change or generate new transboundary impacts.

17. **Clause B.I.3.5 to be deleted.** In accordance with the scope of competence of the Chief Inspector of Sea Fisheries, the Chief Inspector does not have the authority to define in a general manner the rules of fishing within the area of an offshore wind farm. The Inspector determines the conditions of fishing in a special fishing permit or a recreational fishing permit. For this reason, determining the principles of fishing in the area of an offshore wind farm will not have any practical impact on the way the fisheries are carried out.

Additionally, it should be stressed that in accordance with Art. 113b, paragraph 1, item 1 of the *Marine Safety Act* of 18 August 2011 (consolidated text, Journal of Laws 2023, item 1666, as amended), a party generating electricity from wind at an offshore wind farm is obliged to prepare a “Navigational Impact Analysis for the Assessment of the Impact of the Offshore Wind Farm and its Set of Devices on the Safety and Efficiency of Vessel Navigation in the Polish Sea Areas”. Detailed requirements for this document are specified in the Regulation of the Minister of Infrastructure of 15 December 2021 *on the navigational impact analysis and technical expert studies for an offshore wind farm and its set of devices* (Journal of Laws 2021, item 2380). This document requires approval from the director of the maritime office competent for the location of the offshore wind farm prior to the submission of the application for the offshore wind farm construction permit. As the preparation of the latter is required under generally applicable law, it seems needless to repeat the requirements directly deriving from generally applicable legal acts in the text of the Decision on Environmental Conditions.

The amendment in question is of a legal and editorial nature and does not affect the transboundary assessment considerations, or change or generate new transboundary impacts.

18. **Clause B.I.3.6 to be amended** to the following wording:

“The Investment area should be documented with bathymetric plans of the sea basin, underwater survey certificates and seabed survey reports in accordance with the applicable regulations”.

First of all, it should be noted that the provisions of the Regulation of the Minister of Maritime Economy of 23 October 2006 *on the technical conditions for the use of marine hydrotechnical structures and the detailed scope of their inspections* (consolidated text, Journal of Laws 2019, item 1065) referred to in the provision in question are bound to cease to apply on 20 September 2024 under Art. 44 of the Act of 19 July 2019 *on providing accessibility to people with special needs* (consolidated text, Journal of Laws 2022, item 2240). If left, in the absence of the provisions to which the provision refers to, the provision in question will become unenforceable. In addition, it should be noted that the provisions of the administrative decision cannot repeat the text of generally applicable provisions. Thereby, even if the provisions replacing those specified in the regulation repealed as of 20 September 2024 will be introduced, the obligations arising therefrom will be imposed on the entities implementing and operating the offshore wind farm project.

Due to its nature, the amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment. The effects of the proposed amendment refer to documentative measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed

due to the findings of the transboundary environmental impact assessment.

19. Clause B.I.3.7 to be amended to the following wording:

“Bird flights across the OWF area should be continuously recorded using a flight intensity monitoring system, employing at least a radar system or another system characterised by detection efficiency no worse than that of a radar system, which automatically detects the flight paths and assigns information making it possible to define the sizes of birds flying in the area and their flight parameters, i.e. the altitude, speed, and course of the flight paths. The system should allow for detecting and identifying the flights of the common crane and nocturnal migrants.”

The proposed wording of the clause is to allow systems for detecting bird flights other than radars. Additionally, in accordance with the results of the collision model, it emphasises the need to identify the common crane and detect the flights of nocturnal migrants.

The effects of the proposed amendment refer to monitoring measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment. The proposed amendment provides for a possibility of conducting monitoring in a way ensuring the provision of appropriate data on the Investment’s impact.

20. Clause B.I.3.8 to be amended to the following wording:

“The OWF should be provided with a bird flight monitoring system and a shut-down/speed reduction system for individual WTGs along the flight paths, which will be started up when the flights of the common crane or nocturnal migrants are detected.

Individual WTGs should be temporarily shut down or have their speed reduced, and if this cannot be done, these measures should apply to the entire OWF:

- a) in the periods of the most intense and peak seasonal migrations of nocturnal migrants at collision altitudes (i.e. between 15 March and 30 April and between 1 September and 31 October, with particular consideration given to unfavourable weather conditions);
- b) in the event of the common crane flying at collision altitudes;

The flight intensity should be determined based on the indications of the flight intensity monitoring system, in particular as regards nocturnal migrants and the common crane.”

In terms of cumulative impacts, the greatest concerns are associated with collisions of cranes and, due to the lack of knowledge on how to avoid collisions, also with the flights of nocturnal migrants, and this is the context in

which a shut-down system is proposed for these bird groups. The proposed provision does not define what type of system should be used. The system should be able to record bird flights, recognise at least common cranes, detect bird flights at night, and shut down individual WTGs. The migration period was also changed (extended) to end on 31 October rather than the originally assumed 15 October. The effects of the proposed amendment do not generate any new transboundary impacts. The impacts are confined to the original findings of the environmental impact assessment.

The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment. The effects of the proposed amendment refer to monitoring measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment. The proposed amendment provides for the possibility of conducting monitoring in a way that ensures the provision of appropriate data on the Investment's impact.

21. **Clause B.I.4.2 to be amended** to the following wording:

“The Investment area should be documented with bathymetric plans of the sea basin, underwater survey certificates and seabed survey reports in accordance with the applicable regulations”.

For an explanation, refer to point 18 above.

Due to its nature, the amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment. The effects of the proposed amendment refer to documentative measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

22. **Clause B.II.2 to be amended** to the following wording:

“Use WTGs with a solid structure that meets the following parameters:

- the maximum total height of WTGs: 327 m;
- the minimum clearance between the lower position of a WTG blade and the water surface: 22 m;
- the maximum rotor diameter: 305 m.”

The consequence of the amendment in question is also updating the provisions and analyses conducted as part of the EIA Report.

With reference to the effects of the planned changes in the quantitative and scale parameters of WTGs, it should be pointed out in the first place that they result from the continuous technological progress as regards the parameters of offshore WTGs, primarily the market availability of WTGs with increasingly higher capacity and, consequently, larger sizes, due to which the Investor decided to update the Investment parameters by increasing the maximum total height of the WTGs and the rotor diameter. It should be noted here that although the parameters of a single WTG have been increased, their use allows for a significant reduction in the total number of structures (from 44 WTGs in the original option provided for in the decision issued [RAO] to 25 WTGs in the variant planned for implementation and taking account of the changes [APO]) and a reduction in the total sweep area of the rotors, and consequently, a reduction in the generated adverse impacts.

The above change in the parameters was included in the new analysis, in which collision risk modelling was performed for the purposes of updating the EIA Report, the detailed results of which are presented in Volume III (Chapter 4.9.1.2).

Based on the general model of the bird collision risk (Table 4.23 below, Chapter 4.9.1.2.3, Volume III), in terms of the lowest number of collisions (aggregate value) and with the identical number of endangered subjects of assessment (the index of “0” in each variant), the variant taking account of the changed Investment parameters (APO 25 x WTG) proved to be slightly more favourable in comparison with the previous Investor’s variant (the current RAO 44 x WTG). This refers to bird migrations in spring and autumn, both during the day and at night.

With the above-mentioned indicator species/groups being distinguished (Table 4.24 below, Chapter 4.9.1.2.3, Volume III), in terms of the lowest number of collisions (aggregate value and individually for individual subjects of assessment) and with the identical number of endangered species/ groups (the index of “0” in each variant), the variant taking account of the changed Investment parameters (APO 25 x WTG) also proved to be slightly more favourable in comparison with the previous variant (RAO 44 x WTG). This refers to migrations of the indicator species/groups in spring and autumn, both during the day and at night.

Table. The summary of the differences between the FEW Baltic II investment options in detailed assessment – general compilation

FEW Baltic II options – summary of the comparison:		APO	RAO (the Investor’s variant as in the 2021 DEC)
Comparative assessment of the FEW Baltic II options for aggregate values of the collision rate		APO 25 x WTG	RAO 44 x WTG
Subjects of assessment in individual flight analysis modules			
	Number of all subjects of assessment	22	22

FEW Baltic II options – summary of the comparison:		APO	RAO (the Investor's variant as in the 2021 DEC)
Comparative assessment of the FEW Baltic II options for aggregate values of the collision rate		APO 25 x WTG	RAO 44 x WTG
Subjects of assessment in individual flight analysis modules			
Diurnal migrations in spring and autumn	Number of subjects of assessment with the collision rate of "0"	5	5
	Number of subjects of assessment with collision occurrence (excluding the rate value of "0")	17	17
	Total value of the collision rate for all subjects of assessment	39.39	52.21
Nocturnal migrations in spring and autumn	Number of all subjects of assessment	3	3
	Number of subjects of assessment with the collision rate of "0"	0	0
	Number of subjects of assessment with collision occurrence (excluding the rate value of "0")	3	3
	Total value of the collision rate for all subjects of assessment	117.59	170.13

Table The summary of the differences between the FEW Baltic II Investment options in detailed assessment – for the indicator subjects of assessment

FEW Baltic II options – summary of the comparison:		APO	RAO (the Investor's variant as in the 2021 DEC)
Assessment of the FEW Baltic II options for the distinguished indicator subjects of comparative assessment		APO 25 x WTG	RAO 44 x WTG
Diurnal migrations in spring and autumn / indicator species, including 1 group)	Long-tailed duck	0.00	0.00
	Common scoter	0.68	0.77
	Razorbill	0.00	0.00
	Little gull	0.12	1.35
	Geese	16.35	21.17
	Divers	0.17	0.26
	Common crane	3.99	5.34
	in total:	Σ 21.31	Σ 28.89
Nocturnal migrations in spring and autumn / indicator group	Small nocturnal migrants	92.20	132.45

The comparison of the results obtained (the expected number of collisions) did not show sufficiently significant differences to assign different degrees of impact assessment to the different options. Therefore, in the cumulative

assessment for each variant, the collision risk was assessed with the same categories of negative significance.

Moreover, the detailed assessment ultimately allowed for indicating a more favourable option (according to the lowest number of expected collisions), however, marked as “slightly” more favourable according to the above-mentioned prerequisites. To sum up, as a result of comparing the detailed assessment of the considered options of the Investment implementation, and based on the obtained results of model surveys of the expected collision rate, the variant incorporating the proposed changes was indicated as slightly more favourable compared to the previous Investor’s option (DEC 2021).

In the context of the issue raised, the proposed change in the project leads to a reduction in the number of WTGs and an increase in their height (from 300 m to 327 m) and the diameter of each individual rotor (from 250 m and an area of 49,087 m² to 305 m and an area of 73,062 m²). However, the project implementation will result in reducing the maximum area of all the rotors installed within the offshore wind farm area from 2,159,828 m² to 1,826,550 m². This last parameter is of particular importance as it translates into the barrier effect and the collision risk.

Taking into account the impact assessment of the proposed changes to the parameters: maximum WTG height and rotor diameter, there is no basis to claim that these alterations negatively affect the probability of increased collision and mortality rates, and therefore they do not require a new transboundary impact assessment for the Investment.

The Investment’s impact taking account of the changes introduced does not go beyond the findings of the environmental impact assessment conducted at the stage of issuing an amended decision. This assessment also took account of the transboundary context, and the proposed amendment is within the initially assumed scope of impacts and does not generate new ones.

23. **Clause B.II.5 to be amended** to the following wording:

“It is permissible to use scour protection for the seabed surface around the structure or to distribute natural material obtained during the construction process over a total area not exceeding 50,700 m².”

Due to anticipated difficulties in completing all piling operations, it is acceptable (as described in the EIA Report, the Project Characteristics section) in the case of pile refusal occurring before the assumed target penetration is reached, to use the technology to remove sediments from inside the pile to allow further pile driving. The use of such a technology is only allowed for the driving of monopiles. The effects of the proposed amendment do not generate transboundary impacts. They only have local impacts confined to the findings of the original environmental impact assessment. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact

assessment. During the phase of surveys preceding the submission of the EIA Report, sediment testing for nutrients and contaminants was carried out, which allowed for concluding that the FEW Baltic II area is not contaminated. The results of the tests conducted on the sediment samples collected were assessed in relation to their content of substances specified in the HELCOM guidelines. No exceeding of permissible levels was detected for any of the substances. As far as benthos is concerned, no rare, protected or endangered species were found. With respect to the depth of the area, no algae or vascular plants constantly growing on the seabed were found.

The effects of the proposed amendment do not generate transboundary impacts. They are local impacts confined to the original findings of the environmental impact assessment. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

24. **Clause B.II.7 to be amended** to the following wording:

“Include in the project the need to implement a bird migration monitoring system that allows:

- a) temporary, remote shut-down/reduction of the speed of individual WTGs or the entire wind farm, with particular consideration given to weather conditions causing limited visibility during the period of the most intense migration of nocturnal migrants, i.e. from 15 March to 30 April and from 1 September to 31 October;
- b) temporary remote shut-down/reduction of the speed of individual WTGs when flying cranes are detected.

The system should ensure continuous observation and recording of a flux of birds migrating through the OWF area and immediate shut-down/reduction of the speed of WTGs along the route of the expected flight of nocturnal migrants and cranes, with an increased collision risk for the migrants – by automatically detecting the movement of birds and automatically assigning information to determine the size of the flying birds and their flight parameters (altitude, speed, and the course of the flight route). The proposed system of temporary shut-down/reduction of the speed of FEW Baltic II WTGs should be optimised through the introduction of an automatic system for monitoring of migrating bird collisions with the use of at least a radar system or any other system showing at least the same effectiveness of detection as the radar system, which will allow precise, real-time assessment of the necessity, scope and timing of its application, as well as the identification of specific WTGs, the operation of which would require a short-term suspension of operation.”

There is no need to define the system for WTG shut-downs during bird migrations in the documentation section of the Decision on Environmental Conditions. A reference to the technology used (radar) has also been removed, as the systems offered today use different technologies to achieve the goal of

detecting and identifying birds in flight. The most important groups of birds requiring protection have been included, as well as the extension of the migration period to 31 October.

The effects of the proposed amendment do not generate transboundary impacts. The impacts are confined to the original findings of the environmental impact assessment. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

The proposed amendment aims to introduce a system allowing for effective bird monitoring in the operation stage. Due to being integrated with the OWF operation control, the system will make it possible to stop or slow down the operation of individual WTGs. The system operation will result in reducing the OWF's impact on nocturnal migrations.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

25. **Clause B.III.2 to be amended** to the following wording:

“An underwater noise reduction system should be used during the piling procedure pursuant to clause B.I.2.17. (the wording consistent with the amending decision).”

A repetition in III.2 of the noise reduction system description was abandoned by making a reference to clause I.2.17. The effects of the proposed amendments do not generate transboundary impacts. The impacts are confined to the original findings of the environmental impact assessment. The amendments do not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

The amendments are the consequence of the previously proposed changes and do not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

26. **Clause B.III.3 to be amended** to the following wording:

“Before the piling works are commenced, a mitigation plan as regards the porpoise should be developed and implemented, which will propose the solutions ensuring a noise reduction to a level not exceeding $SEL_{cum} = 140$ dB re $1 \mu Pa^2s$ at a distance of 8 km from the source of sound and within Natura 2000 sites established to protect porpoises, along with defining the survey point locations, a definition of exceeding the maximum sound level, the time when

operations should be discontinued, and specific mitigation measures allowing for not exceeding the above-mentioned noise limit.”

The effects of the proposed amendment refer to activities ensuring that the impact on marine mammals is reduced to an appropriate level, and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

27. **Clause B.III.4 to be amended** to the following wording:

“The following mitigation measures compliant with the guidelines of the German Federal Maritime and Hydrographic Agency (BSH) (2019) should be implemented by way of:

- applying the pile-driving methods with the lowest mechanical wave emissions;
- forecasting noise emissions during pile-driving. At the current stage of works, it is mainly possible by way of applying numerical models using empirical data obtained during the surveys conducted as part of analogous investments in other sea areas;
- applying deterrent measures to disperse marine mammals prior to piling;
- reducing hammer energy;
- satisfying the hammer operation requirements (high frequency – low energy);
- applying technical systems for noise reduction at a sufficient distance from the piling site (e.g. bubble curtains);
- monitoring the effectiveness of noise mitigation measures, including real-time monitoring of SEL to operate the hammer on site so that the noise emission thresholds are not exceeded within the work performance site and in the nearest Natura 2000 site;
- following the strict procedures for reporting the monitoring results to competent authorities and agencies (HELCOM).”

The regulations on noise limits, defined for a distance of 750 m from the source, do not take into account temporary (TTS) and permanent (PTS) shifts in the hearing threshold for marine species. These regulations set only an arbitrary limit to be respected, but are not based on an assessment of the impact of noise on the marine environment, including marine mammals. The most important aspect in the environmental impact assessment of a project is to take into account the effects of noise on species at risk of exposure. Therefore, the environmental analysis must take account of commonly used and verified limit values for TTS and PTS for various marine species. When assessing the impact of noise on the marine environment, aspects more complex than just

an arbitrarily determined distance from the sound source need to be considered. The TTS and PTS limit values are crucial because they allow for a more accurate determination of the noise impact, especially on species that are more sensitive to sound disturbances (the harbour porpoise, seals, and fish with swim bladders). In summary, the existing noise regulations should take into account not only the distance from the source but above all, the potential impact of noise on specific marine species, based on scientifically justified limit values for TTS and PTS. This approach is crucial for a reliable assessment of an investment's impact on the marine environment.

The effects of the proposed amendment refer to the obligation to introduce a set of measures to reduce the acoustic impact and monitoring measures based on the BSH guidelines and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment. The proposed amendment provides for the possibility of conducting monitoring in a way that ensures the provision of appropriate data on the Investment's impacts.

28. **Clause B.IV.3.1.a) to be amended** to the following wording:

"Pre-investment monitoring of water and seabed sediment quality should be performed, i.e. during the winter period, before the construction work is commissioned, a one-time study of water and sediment quality should be conducted, taking into account the following hydrochemical parameters: oxygen conditions (dissolved oxygen), total organic carbon (TOC), acidity (pH) and concentration of nutrients (ammonium nitrogen, nitrate nitrogen, total nitrogen, mineral nitrogen, phosphates, total phosphorus), water turbidity, total suspended solids, as well as the concentration in water and seabed sediments of harmful substances, such as mercury, heavy metals, phenols, mineral oils, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). The surveys are to be carried out at 20 locations within the FEW Baltic II area."

A one-time water and sediment chemistry study is proposed to establish their original condition. The provision is similar to the provisions of the DEC for the Baltic Power OWF.

The effects of the proposed amendment do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

29. **Clause B.IV.3.1.b) to be deleted.** The proposed monitoring is intended to assess whether the assumptions made in the environmental impact assessment were correct. Monopile driving is one of the operations that cause sediments to disperse to the least extent. Therefore, no such monitoring is

necessary. The proposed monitoring of sediment dispersion during monopile driving is both unsafe and economically unjustified. The range of sediment dispersion will be limited by the very likely use of a large bubble curtain, which, by reducing the density, will cause most of the suspended solids to settle in the area limited by this curtain. Secondly, conducting measurements and surveys between a monopile being driven and a bubble curtain is dangerous and unacceptable under the OHS regulations. The proposed monitoring requires the use of devices deployed on the seabed or installed in the water depth, which can be destroyed. The use of acoustic sensors is impossible in practice due to underwater noise.

The effects of the proposed amendment do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

30. **Clause B.IV.3.1.c) to be amended** to the following wording:

“Marine mammal monitoring

The monitoring aims to identify the presence of marine mammals (porpoises) and assess the impact of the investment on the above-mentioned group of animals. Passive acoustic monitoring of the porpoise should be carried out using autonomous harbour porpoise click detectors. At least three detectors of clicks emitted by porpoises should be placed near the FEW Baltic II area during the construction phase. Additionally, three automatic porpoise click detectors should be installed in two different reference areas, located at least 20 km from the source of impact (i.e. within the range of the behavioural response to pile driving). The monitoring should start no later than 6 months before the commencement of the construction and continue throughout its implementation. The monitoring should also take into account the issue of transboundary impacts.”

C-PODs are no longer in production; they have been replaced by F-PODs. To avoid the consequences of future changes, the phrase “autonomous porpoise detectors” will be sufficient. The effects of the proposed amendment do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

31. **Clause B.IV.3.1.d) to be amended** to the following wording:

"Underwater noise measurements should be carried out using autonomous survey buoys equipped with an omnidirectional hydrophone to record underwater sounds in the frequency range from 10 Hz to 20 kHz. Construction noise measurements (included in the scope of work for the foundation elements) should be carried out at the stage of piling. The survey stations, i.e. the positions of buoys measuring underwater noise, should be determined in such a way as to assess the level of underwater noise at the boundary of the nearest Natura 2000 sites, i.e. the Swedish site Hoburgs Bank and Midsjöbankarna SE0330308 and the Polish site Ostoja Słowińska PLH220023, in which the object of conservation is the harbour porpoise (at least 2 stations in total), within the FEW Baltic II area including a 5 km buffer zone (at least 4 stations) and at a distance of 8 km from the sound source in the main direction of propagation (with at least 1 station monitored in real time), in accordance with the guidelines of the Bundesamt für Seeschifffahrt und Hydrographie, 2013 on how to perform and interpret measurements, while maintaining the locations of the survey stations described above. In addition to detecting any cases of exceeded permissible underwater noise levels, the monitoring is also aimed at detailing the models and verifying the degree of impact of anthropogenic noise from the Investment on marine fauna, using the implemented underwater noise reduction system, as well as ensuring that noise levels are reduced so that within 8 km from their source and within the boundaries of Natura 2000 sites designated for the protection of porpoises, the maximum underwater noise level $SEL_{cum} = 140 \text{ dB re } 1 \mu\text{Pa}2s$ and weighted by the HF function is not exceeded."

The proposed monitoring is intended to assess whether the assumptions made in the environmental impact assessment were correct. The proposed monitoring at a point located in the main direction of the propagation will allow ongoing monitoring of noise levels, thus enabling the detection of exceeded values, while additional measurement points will provide information on noise at various distances from the piling site. At the same time, this will eliminate the logistics problems associated with deploying 4 survey sets (a distance of 750 m, 5 km, 8 km and at the boundary of the Natura 2000 sites) during each piling procedure while maintaining full control of exceeded values. The provision is similar to the provisions of the DEC for the Baltic Power OWF. The effects of the proposed amendments do not generate transboundary impacts. The impacts are confined to the original findings of the environmental impact assessment. The amendments do not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures, and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

32. **Clause B.IV.3.2.a) to be amended** to the following wording:

“Before the work is commenced, and next in the fifth and tenth year after the start of the operation stage, depending on the results of the first series of surveys described, the hydrochemical parameters of water should be measured, including dissolved oxygen, total organic carbon (TOC), acidity (pH), nutrients (ammonium nitrogen, nitrate nitrogen, total nitrogen, mineral nitrogen, phosphates, total phosphorus), water turbidity, and total suspended solids.

Before the work is commenced, and next in the fifth and tenth year after the start of the operation stage, depending on the test results, the concentrations of harmful substances in water and seabed sediments should be measured, including mercury, nickel, lead, cadmium, arsenic, total chromium, chromium (VI), zinc, aluminium, phenols, mineral oils, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), TBT, and TOC.

The tests are to be conducted at 20 locations within the FEW Baltic II area.

If significant changes in the levels of the pollutants monitored are observed, the necessity for possible further monitoring and its scope should be agreed with the General Director for Environmental Protection in Szczecin."

The proposed monitoring is intended to assess whether the assumptions made in the environmental impact assessment were correct. Continuous monitoring has been abandoned because, by design, FEW Baltic II is not expected to pollute water and sediments. Therefore, it will be sufficient if such a state of water and sediments is confirmed five years and ten years after the start of the OWF operation. If the area is found to be polluted, further monitoring will be agreed with the administration. Since no pollution is assumed, multiple annual tests have been replaced with tests that are less frequent but cover more stations, which will allow better detection of pollutants. The provision is similar to the provisions of the DEC for the Baltic Power OWF.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

33. **Clause B.IV.3.2.b) to be amended** to the following wording:

“Benthos monitoring:

- the surveys of periphytic flora and fauna:
 - during the surveys of the periphytic flora and fauna, video and photographic documentation should be made of the entire vertical plane of the foundation or support structure (for at least 3 such structures) overgrown by macroalgae and periphytic fauna;
 - the samples should be collected starting at the water surface and proceeding down to the depth of the maximum recorded

occurrence of the periphytons, at individual depths, at a maximum interval of 2 m, from a specific surface for studies of the taxonomic composition and biomass of periphytic flora and fauna;

- during the monitoring, particular attention should be paid to invasive species;
- the surveys of periphytic flora and fauna should be carried out in accordance with the methodology presented in the methodical guide on macroalgae

and angiosperms [“Makroglony i okrytozalążkowe”, in Polish, Kruk-Dowgiałło L. et al, (in:) “Przewodniki metodyczne do badań terenowych i analiz laboratoryjnych elementów biologicznych wód przejściowych i przybrzeżnych”, 2010] available in the “Methodological Guides for Field Studies and Laboratory Analyses of Biological Elements of Transitional and Coastal Waters”;

– macrozoobenthos surveys:

- in the vicinity of a single foundation or support structure of an offshore wind turbine generator, 6 stations need to be selected for macrozoobenthos monitoring, including 3 stations on the transect of the main profile (in the axis of the near-seabed current) at the distances of 20, 50, and 100 m from the foundation or support structure, and 3 stations on a transect perpendicular to the main profile (a reference profile) at the same distances;
- macrozoobenthos surveys should be conducted in accordance with the current methodologies adopted by the Baltic Marine Environment Protection Commission (Helsinki Commission – HELCOM);
- the benthos surveys are to be conducted on at least 3 foundations or support structures of offshore wind turbine generators, including turbines constructed at different stages and located in different parts of the FEW Baltic II area. The monitoring is targeted to study the colonisation of artificial hard substrates by animal and plant periphyton communities;
- the first benthic surveys should be conducted after at least 3 months have elapsed since the completion of the offshore WTG selected for monitoring. Subsequent surveys are to be performed once in June, 2 and 4 years after the first survey. The last survey should take place one year before the planned dismantling of the offshore wind turbine generator."

Macrozoobenthos surveys have been separated from surveys of the periphytic flora and fauna. Due to the limited number of habitat types and relatively

uniform geomorphological conditions, the number of survey stations has been reduced to three. The provision is similar to the provisions of the DEC for the Baltic Power OWF.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

34. **Clause B.IV.3.2.c) to be amended** to the following wording:

“The monitoring aims to identify the Investment’s impact on ichthyofauna.

Periodic monitoring of ichthyofauna should be conducted, which should be correlated with the surveys of benthic communities developed on the “artificial reef”. To ensure the comparability of the results, the monitoring should be conducted following the methodology adopted for the pre-investment monitoring, i.e. using the same locations, the same survey equipment and the same frequency of surveys to the extent possible. The surveys should be conducted immediately after the OWF construction is completed, and then six years following the structure installation. Moreover, as part of the monitoring, at the same locations and with the same frequency, ichthyoplankton sampling should be conducted in accordance with the methodology recommended by the Food and Agriculture Organization of the United Nations (FAO) (Smith and Richardson, 1977).”

The proposed amendments, i.e. giving up the reference area, and reducing the monitoring duration to immediately after the completion of the construction and six years after the structure installation, are aimed to minimise the adverse impact of the surveys on ichthyofauna resulting from substantial fishing efforts (e.g. during the inventory surveys for the Bałtyk I OWF, approx. 0.8 tonne fish were caught in bottom-set gillnets, and during the inventory surveys for the Baltica OWF approx. 1560.75 kg fish were caught in bottom-set gillnets) and the non-selectivity of the applied research gear. Taking account of the decreasing fish populations in the Baltic Sea, in particular the cod population, and the decreasing total allowable catches, which is addressed in the report “*Niespokojny Bałtyk. Polskie rybołówstwo a morskie farmy wiatrowe*” [“*The Rough Baltic Sea. The Polish Fisheries vs. Offshore Wind Farms*”] (Instrat Policy Paper 01/2024, Warsaw, October 2024), the form of monitoring proposed in the valid Decision on Environmental Conditions is not only unnecessary but also prodigal. Moreover, it should be emphasized at this point that the EIA Report defined the Investment’s impact on ichthyofauna as a local impact of low intensity.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the

Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

35. **Clause B.IV.3.2.e) to be amended** to the following wording:

"During the operation stage, conduct:

e) migratory bird monitoring

- the monitoring of migratory birds should be conducted using simultaneous visual and radar observations to identify flight trajectories (including altitude), reaction, and species, as well as acoustic surveys conducted at night;
- as part of radar surveys of migratory birds, the flight trajectories of birds flying towards the OWF and their reaction to encountering a barrier in the form of the OWF should be determined and the intensity of migration in the OWF area and in its immediate vicinity should be assessed;
- the migratory bird survey stations are to be located on a fixed platform (such as a substation) or an anchored vessel, which allows observation of the OWF from the direction from which birds are coming at a given stage of migration (in spring, the south-western side of the OWF, and in autumn, the north-eastern side of the OWF);
- the monitoring of migratory birds shall be conducted in the first and second year after the construction of the FEW Baltic II is completed; to collect data taking into account the migration corridor shared by the FEW Baltic II and the Bałtyk II OWF, the third year of the monitoring should be planned in the year after the Bałtyk II OWF is put into operation, or in the fifth year after the construction of the FEW Baltic II, if the Bałtyk II OWF is not put into operation in 3 to 5 years from the construction of the FEW Baltic II;
- in each of the bird migration seasons, complete no less than 20 days of observations in 2–5 day sessions, evenly distributed throughout the season."

The proposed amendments concerning the monitoring of migratory birds conducted from aboard research vessels aim to adapt the provisions to the technical capabilities of today's survey systems by defining the monitoring function without specifying the technology in detail. The monitoring will have to effectively recognise flight trajectories, also ensuring species identification of diurnal migrants. The monitoring described in this way will also allow for assessing the effectiveness of "corridors" between OWFs, which is why it is necessary to adjust the monitoring period to the date of commissioning of the neighbouring Bałtyk II OWF. There is no need to extend the monitoring period because if necessary, information on bird migrations can be obtained from the shut-down system installed in the OWF area, while the proposed monitoring is to assess the validity of the assumptions adopted. The proposed monitoring is

to assess the rightness of the assumptions made. The provision is similar to the provisions of the DEC for the Baltic Power OWF.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

36. **Clause B.IV.3.2.f) to be amended** to the following wording:

“Bird mortality/collision rate

The monitoring aims to examine the actual level of mortality among migratory birds, with particular emphasis on the objects of conservation in the Natura 2000 SPAs, during nocturnal and diurnal migrations of birds. The monitoring should continue for 4 years, during seasonal spring migrations (from the beginning of March to the end of May) and autumn migrations (from the beginning of July to the end of November). The survey scope and methods should rely on the use of an automated system for recording bird collisions with WTGs, providing the possibility of conducting measurements both at night and during the day.

As part of the monitoring, the automatic bird collision detection system should be installed on at least three WTGs within the FEW Baltic II area:

- in the eastern part of the FEW Baltic II area, on one of the extreme WTGs located in the immediate vicinity of the zone free of FEW Baltic II WTGs near the neighbouring Bałtyk II OWF;
- on one of the WTGs located in the western part of the FEW Baltic II area;
- on one of the WTGs located in the central part of the FEW Baltic II area.

It is allowed to install the system in other locations if they are identified as optimal for the system to be installed by the system provider or based on the data obtained as a result of monitoring surveys and ornithologists' recommendations.

The monitoring should also take into account the issue of transboundary impacts."

The amendment is aimed at harmonisation of the dates of both monitoring surveys, which will allow for a one-to-one comparison of data, and remove the inconsistency in the description which indicates that mortality monitoring should be carried out during the autumn migration period, while the date of this monitoring (of bird mortality) is not consistent with the date of monitoring dedicated to autumn migrations. Moreover, other locations have been allowed for migratory bird mortality/collision monitoring to enable the appropriate operation of different types of monitoring systems (systems installed on individual WTGs vs. systems covering numerous WTGs).

The effects of the proposed amendment refer to monitoring measures and impact reduction measures, and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

37. **Clause B.IV.3.2.h) to be amended** to the following wording:

"The porpoise occurrence monitoring should be conducted in the first year after the construction of the entire OWF is completed, using the same methods as during the pre-investment monitoring until porpoise occurrence is observed again."

The reference to the range of the pile-driving response in the operation phase worded in the clause may be misunderstood, which is why it has been proposed to refer rather to the monitoring methodology applied in the construction phase. Moreover, it has been proposed to change the monitoring duration until porpoises are detected again, which will prove that they have returned to the OWF area and the original condition has been restored and, consequently, the monitoring aim has been achieved. The effects of the proposed amendments do not generate transboundary impacts. The amendments do not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

38. **Clause B.IV.3.2.i) to be amended** to the following wording:

"Noise monitoring:

The ambient noise measurements should be repeated in the middle of the area occupied by the OWF and at the boundary of the Słupsk Bank SPA.

The ambient noise measurements should be conducted in compliance with the BSH guidelines, i.e. separately for the three sea states: at wind speeds of approx. 2, 4, and 6 B. For each sea state, four 24-hour measurements should be conducted, one in each subsequent quarter."

The proposed provision is more coherent and simpler and achieves the objective of establishing the actual impact on the ambient noise. In practice, surveys are carried out anyway with the use of submerged sensors deployed for an extended period (e.g. 3–4 weeks), which allows several data sets to be selected for different weather conditions. "Hunting" for particular weather conditions with sensors located close to the vessel is economically unjustifiable and, in addition, its results may be distorted by recording the

noise generated by the vessel. The clause is analogous to the provisions in the DEC for the Baltic Power OWF in the proceedings of the General Director for Environmental Protection. The effects of the proposed amendments do not generate transboundary impacts. The amendments do not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.

The effects of the proposed amendment refer to monitoring measures and impact reduction measures and thus do not generate transboundary impacts. The amendment does not require the conditions for the Investment implementation to be updated or changed due to the findings of the transboundary environmental impact assessment.