



REGIONAL DIRECTOR FOR
ENVIRONMENTAL
PROTECTION IN GDAŃSK

RDOŚ-Gd-WOO.420.41.2022. AM.6.

Gdańsk, November 8, 2022

zpo

DECISION

Pursuant to Article 104 and Article 154 § 2, Article 155 of the Act of June 14, 1960, Code of Administrative Procedure (consolidated text, Journal of Laws of 2022, item 2000), and Article 75 section 1 point 1 letter c), in conjunction with Article 71 section 2 point 1 and Article 87 of the Act of October 3, 2008, on access to information on the environment and its protection, public participation in environmental protection and on environmental impact assessments (consolidated text, Journal of Laws of 2022, item 1029, as amended) and § 2 section 1 point 5 of the Regulation of the Council of Ministers of September 10, 2019, on projects that may have a significant impact on the environment (consolidated text, Journal of Laws of 2019, item 1839, as amended), having examined application ref. No.: MFWBIII-034/2022/AM (date of receipt: June 13, 2022) of MFW Bałtyk III Spółka z o.o. with its registered office in Warsaw, acting through the representative Ms. Anna Marczak, for the change of the decision on environmental conditions ref. No.: RDOŚ-Gd-WOO.4211.12.2015.KP.22 of July 7, 2016, issued by the Regional Director for Environmental Protection in Gdańsk, for the project entitled

“Construction of the Bałtyk Środkowy III Offshore Wind Farm” (hereinafter referred to as BIII OWF or BSIII OWF).

taking into account the data contained in:

- the environmental impact assessment report for the change of the decision on environmental conditions, Bałtyk Środkowy III Offshore Wind Farm prepared by Kancelaria Radców Prawnych Otawski, Dziura, Jędrzejewski i Troszyński Sp. p., Warsaw, June 2022;
- opinion of the State Border Sanitary Inspector in Gdynia, ref. No.: SE.ZNS.80.4912.6.22 of July 18, 2022;
- approval of the Director of the Maritime Office in Gdynia, decision ref. No.: INZ.8103.92.2022.IK of July 14, 2022;

having completed the environmental impact assessment for the project;

I hereby decide to

- I. change the decision on environmental conditions ref. No.: RDOŚ-Gd-WOO.4211.12.2015.KP.22 of July 7, 2016 (hereinafter referred to as the “Environmental Decision”), issued by the Regional Director for Environmental Protection in Gdańsk for the

project entitled: "Construction of the Bałtyk Środkowy III Offshore Wind Farm", as follows:

1) point 1.1. entitled Type and location of project implementation, reading as follows:

The subject of the project is the construction and operation of the Bałtyk Środkowy III Offshore Wind Farm ("BSIII OWF"), located in the southern part of the Baltic Sea, in the Polish Exclusive Economic Zone, at the nearest distance of approx. 23 km north of the coastline, at the level of the municipality of Smołdzino and the urban municipality of Łeba (Pomeranian Voivodship). The boundaries of the area of the BSIII OWF are defined by the geographic coordinates specified in the permit for erection and use of artificial islands, structures and devices in the Polish maritime areas ("PSZW") for the Bałtyk Środkowy III OWF project No. MFW/2/2012 of March 30, 2012, referred to in the table below.

Geographic coordinates of the BSIII OWF project:

Point	Coordinates	
<i>A</i>	$\phi = 54^{\circ}56'42,424''\text{ N}$	$\lambda = 17^{\circ}16'57,430''\text{ E}$
<i>B</i>	$\phi = 55^{\circ}02'35,801''\text{ N}$	$\lambda = 17^{\circ}14'00,653''\text{ E}$
<i>C</i>	$\phi = 55^{\circ}02'52,125''\text{ N}$	$\lambda = 17^{\circ}14'45,028''\text{ E}$
<i>D</i>	$\phi = 54^{\circ}59'55,268''\text{ N}$	$\lambda = 17^{\circ}31'37,853''\text{ E}$
<i>E</i>	$\phi = 54^{\circ}57'24,641''\text{ N}$	$\lambda = 17^{\circ}24'47,597''\text{ E}$
<i>F</i>	$\phi = 54^{\circ}57'09,443''\text{ N}$	$\lambda = 17^{\circ}22'42,654''\text{ E}$
<i>G</i>	$\phi = 54^{\circ}57'05,517''\text{ N}$	$\lambda = 17^{\circ}21'25,617''\text{ E}$

The total area of the farm is approx. 117 km² and the area for development, according to the conditions specified in the PSZW, is approx. 89 km².

Expected maximum power of the BSIII OWF is 1200 MW. The project will be performed in stages.

The project consists of:

- 1) no more than 120 wind turbines, the basic components of which are: foundation, tower, nacelle with a power generator, and rotor,*
- 2) no more than 6 offshore substations,*
- 3) up to 200 km of sections of internal submarine power and telecommunication cables in total.*

Individual components of the BSIII OWF may be located in the whole project area intended for development, i.e. with maintaining a buffer 500 m wide from the internal border of the area intended for the execution of the farm. The locations of particular farm components will be determined after geotechnical surveys of the seabed and wind measurements as well as analysis of farm productivity in the building permit design.

The boundary parameters of the individual components of the BSIII OWF are specified in the table below:

Parameter	Boundary value
<i>Maximum number of wind turbines [pcs]</i>	<i>120</i>

Maximum total height of the wind turbine a.s.l. [m]	275
Minimum clearance between the lower blade position and the average sea surface [m]	20
Maximum rotor diameter [m]	200
Maximum zone for a single rotor [m ²]	31,400
Maximum total zone for the rotors [m ²]	3,768,000
Maximum number of accompanying infrastructure foundations [pcs]	6
Maximum seabed area occupied by 1 foundation [m ²]	1257
Maximum seabed area occupied by all foundations [m ²]	158,382
Highest density of wind turbines [pcs/km ²]	1.35
Maximum cable length of the farm internal connection infrastructure [km]	200

Wind turbines and transformer stations will be placed on foundations on the seabed. 4 types of foundations can be used at the BSIII OWF: monopiles, gravity-base foundations, jacket foundations and tripod foundations.

The monopiles constructed of steel welded cylinders will be up to 80 m long and up to 10 m in diameter. The jacket foundations, consisting of four steel legs connected and reinforced by brackets made of cross-mounted pipes, will have legs up to 1 m in diameter. The maximum distance between the legs is 40 m. The foundation will be fixed to the seabed with 4 piles with a maximum diameter of 1.8 m and a maximum length of 70 m. The tripod foundations, consisting of 3 legs supporting one central leg, which forms the base for the connector and the tower, equipped with sleeves for pile fixing, will have the main column with a diameter of up to 7 m and legs with a diameter of up to 5 m. The maximum distance between the foundation legs is 40 m. The foundation will be fixed to the seabed with 3 piles with a maximum diameter of 2.5 m and a maximum length of 60 m. Gravity-base foundations, being a reinforced concrete structure, consist of a main core and a base, with a maximum diameter of 40 m.

For all types of foundations (especially for gravity-base and monopile foundations, less often for other types of foundations) a scour protection layer can be applied, such as: a layer of stones with a width of a few to even 20 meters and a depth of several meters, laid around the foundation. The necessity for its placement, width and depth will be determined in the building permit design.

The towers of wind turbines built of steel, concrete or reinforced concrete rings, connected with each other, will be embedded on the foundations. The tower will be embedded on the foundation by means of a steel sleeve, the so-called transition piece or a connector, on which there may also be additional elements, such as the place of anchoring service vessels, ladders, intermediate platform, working platform, as well as elements of power infrastructure (flexible cable shields, the so-called J-tubes and power and telecommunication cables).

The towers will be equipped with wind turbines with a rotor consisting of three blades and a hub located in the front part of the nacelle. Plastics (glass fiber) will be the basic structural material for the blades. A helicopter landing platform can be installed on the nacelles of a wind turbine.

One or more models of towers and turbines can be installed at the farm.

Wind turbines will be connected by means of a grid of 33–66 kV power cables to the

substations. The total length of cables inside the farm will not exceed 200 km. Their final length will depend on the number and set up of the wind turbines and will be specified in the building permit design. The cables will be buried in the seabed up to a depth of 3 m. If the technical conditions do not allow for their burying, they will be covered with a layer of stones or other specially adapted loads.

Electricity generated by the wind turbines belonging to the BSIII OWF will be prepared at the farm for further transmission. For this purpose, a maximum of 6 internal offshore substations ("OS") will be built within the boundaries of the farm.

The following types of OS can be built within the framework of the BSIII OWF:

- 1) transformer substations – receiving alternating current (AC) from wind turbines and then adjusting its voltage to an appropriate level, enabling its further transmission outside the wind farm in alternating current technology;
- 2) converter (AC/DC) substations – converting alternating current (AC) to direct current (DC), enabling its further transmission outside the farm in direct current technology;
- 3) substations combining both functions.

The decision whether the energy will be transmitted to the shore in direct or alternating current technology will be made at the stage of building permit design.

The AC offshore transformer station will be constructed on the basis of a platform embedded on monopile, jacket, tripod or gravity-base foundations. The necessary power and staff welfare infrastructure will be installed on the working platform. Power of a single station is 150 to 350 MW. Parameters of the station of such power can amount to: 30 x 30 m area, height up to 20 m, weight up to 1500 Mg. OS AC may consist of the following elements: indoor switchgear, power transformers, MV and HV switchgears, reactive power compensation reactors and capacitors, transformers or power generators to provide backup power, earthing system, control panel of internal systems, low-voltage distribution equipment for auxiliary equipment and protection, control and instrumentation systems, UPS uninterruptible power supply, SCADA equipment, service staff accommodation, rest and welfare rooms, material storage, workshop, boat landing, helicopter landing area, operational health and safety as well as emergency equipment including Diesel generators, emergency lighting, lifeboats.

If a decision on using direct current transmission technology is made, an offshore AC/DC converter station may be built at the farm. The AC/DC converter station will be constructed on the basis of a platform embedded on monopile, jacket, tripod or gravity-base foundations. The necessary power infrastructure will be installed on the working platform, in particular equipment for converting alternating current into direct current. The main components of a converter station are converter transformers, converter thyristors, harmonic filters, capacitor batteries, reactive power compensation reactors, an external pumping station (cooling system). The maximum transmission capacity of the station is 900 MW. The working platform will be up to 100 m long and up to 60 m wide and up to 40 m high.

The substations may also be used as a place of installation of equipment for environmental measurements and monitoring, e.g. meteorological data or wave information.

The transmission of electricity generated by the BSIII OWF to the National Power System will be carried out through the offshore transmission infrastructure ("OTI") consisting of export cables and substations, in accordance with the agreement on the grid connection of the Bałtyk

Środkowy III OWF to the transmission grid. The OTI is the subject of a separate procedure for issuing an environmental decision.

The BSIII OWF will be implemented in stages. The division into stages results mainly from the connection agreement concluded by the investor, which allows for connection to the National Power System of 600 MW by 2021, and the remaining 600 MW by 2025. Decisions on the staging details will be made only after the execution of the wind measurement campaign, geotechnical surveys of the seabed and obtaining the project financing. This decision refers to the scope of the project covered by all stages of its implementation.

to be replaced with:

The subject of the project is the construction of the **Bałtyk Środkowy III OWF** with a power output ranging from 720 MW to 1200 MW. The project will be located in the southern part of the Baltic Sea, in the Polish Exclusive Economic Zone, approx. 23 km north of the coastline, at the level of the municipality of Łeba (Pomeranian Voivodship). The total area of the **BIII OWF** is approx. 117 km². The geographic coordinates of the project are presented in the table below:

Table 1. Geographic coordinates of the boundaries of the BIII OWF area.

Point	WGS 84 DD°MM'SS.sss"	
	Latitude	Longitude
A	54°56'42,424" N	17°16'57,430" E
B	55°02'35,801" N	17°14'00,653" E
C	55°02'52,125" N	17°14'45,028" E
D	54°59'55,268" N	17°31'37,853" E
E	54°57'24,641" N	17°24'47,597" E
F	54°57'09,443" N	17°22'42,654" E
G	54°57'05,517" N	17°21'25,617" E

The **BIII OWF** will consist of:

- up to **60** wind turbines ("WT"), the basic components of which are: foundation, tower, nacelle with a power generator, and rotor,
- **1 internal offshore** substation ("OS"),
- a maximum of 200 km of submarine power and telecommunication cables, connecting the WTs with each other and groups of wind turbines with the internal offshore substation.

The Investor holds a permit for erection and use of artificial islands, structures and devices in the Polish maritime areas (PSZW) for the project in question – decision of the Minister of Transport, Construction and Maritime Economy No. MFW/2/2012 of March 30, 2012. The permit however, includes a condition stating that the components of the OWF cannot be located in the buffer of 500 m from the internal boundary of the area intended for the farm construction. All structural components of the farm have to be located within the boundaries of the specified area, so it determines the maximum external range of the rotor, which additionally limits the area where foundations can be laid. The size of this limitation depends on the rotor radius. Moreover, as a result of the analysis of potential environmental impacts of the project, additional restrictions were made in the use of the OWF development area due to the possibility of creating a negative impact of the project on seabirds; during the design works, a decision was made to leave the area located in the west-northern corner of the farm undeveloped with wind turbines, in such a way as to create a passable 5 km wide corridor undeveloped with wind turbines, crossing the areas of the Bałtyk Środkowy III OWF, Baltica 2 OWF and Baltica 3

OWF in the SW-NE direction. Taking the above into account, the total surface area of the farm is approx. 117 km², including:

- the surface area for development, in accordance with the conditions specified in the permit for erection and use of artificial islands, structures and devices in the Polish maritime areas issued for the project, is approx. 94 km²;
- the surface area for development, taking into account the exclusion of a part of the BIII OWF area, for the purpose of creating a passable migration corridor for birds between groups of wind turbines, belonging to the projects located on the northern and north-eastern slope of the Słupsk Bank, is approx. 88 km².

The **BIII OWF** does not include the infrastructure for transmitting electricity generated by the farm to the shore. A separate project, the Offshore Transmission Infrastructure ("OTI"), will serve this purpose. For the project, decision ref. No.: RDOŚ-Gd-WOO.4211.12.2016.KSZ/AJ.29 of March 12, 2019 on environmental conditions for implementation of the project consisting in the construction of the offshore transmission infrastructure was issued by the Regional Director for Environmental Protection in Gdańsk. The WT parameters will depend on the selected capacity (the higher the power output, the higher the tower and the longer the turbine blade span is required). The basic boundary parameters of the wind turbines planned for installation at the **BIII OWF** are presented in the table below.

Table 2. Basic boundary technical parameters of wind turbines according to the option selected for implementation

Parameter	Option selected for implementation
Maximum total height of the wind turbine a.s.l. [m]	310
Minimum clearance between the lower blade position and the sea surface [m]	20
Maximum rotor diameter [m]	250
Maximum number of wind turbines [pcs]	60
Maximum zone for a single rotor [m ²]	49,088
Maximum total zone for the rotors [m ²]	2,945,244
Maximum number of accompanying infrastructure foundations [pcs]	1
Types of wind turbine foundations considered	Foundations: monopile and jacket (truss) foundations
Maximum seabed area occupied by 1 foundation of a wind turbine [m ²]	79
Types of accompanying infrastructure foundations considered	Foundations: monopile, tripod, jacket (truss) foundations and gravity-base foundations
Maximum seabed area occupied by 1 foundation of accompanying infrastructure [m ²]	1,964
Minimum distance between wind turbines (counting from the axis of individual structures) [m]	800

Parameter	Option selected for implementation
Maximum seabed area occupied by all foundations [m ²]	6,676
Maximum cable length of the farm internal connection infrastructure [km]	200

A wind turbine is mounted on a tower, consisting of steel pipes with an average diameter of approx. 10 m (depending on the model). The basic structural materials of turbine blades include epoxy and polyester resins, carbon fiber, glass fiber and laminates. The wind turbine towers will be mounted on foundations which, in turn, will be placed on the seabed. Currently, 4 types of foundations for the components of the farm can be used, whereas in the case of wind turbines, only monopile or jacket (truss) foundations can be used, and in the case of the substation, apart from the two mentioned types, it is also possible to use tripod foundations and gravity-base foundations (*gravity based structures – GBS*).

The monopiles are made of steel cylinders with a diameter of 5–10 m that will be driven into the seabed. They are up to 120 m long. They are currently the most popular type of foundations used in the OWF. In the case of the BIII OWF, the maximum diameter of a pile in case of placing the wind turbine on monopile foundations will be 10 m.

A jacket foundation is made of four steel legs connected and reinforced with brackets made of cross-mounted pipes. That is why it is also called a truss foundation. These foundations are fixed to the seabed using 4 piles with a diameter of 1.8–3 m and a length of up to 70 m.

The tripod structure consists of one main section (1st stage), which is the base for the fastener and the tower, and three 2nd stage sections, which are the foundation legs. The tripod legs are equipped with sleeves for pile fixing. These foundations are fixed to the seabed using 3 piles with a diameter of up to 2.5 m and a length of up to 60 m.

The gravity-base foundation is a reinforced concrete structure. Its concept is based on the use of large mass to support the structure of an offshore substation. Gravity-base foundation consists of a main body and a base. The base can be conical or flat (in the shape of an octagon, hexagon, circle, etc.) and have a diameter of up to 50 m. The gravity-base foundation is filled with ballast.

Wind turbines will be connected by means of a grid of 33 kV or 66 kV power cables to the substation. It is planned to lay up to 200 km of cables inside the farm. The cables will be buried in the seabed up to a depth of 3 m. If the technical conditions do not allow for their burying, they will be **provided with permanent protections, in accordance with § 54 section 7 point 4 letter b of the Regulation of the Council of Ministers of April 14, 2021 on the adoption of a spatial development plan for internal sea waters, the territorial sea and the exclusive economic zone at a scale of 1:200,000 (Journal of Laws, item 935) (Appendix No. 2 to the Regulation – Detailed Decisions).**

Electricity generated by the wind turbines belonging to the **BIII OWF** will be prepared at the farm for further transmission. For this purpose, **1 internal offshore substation (OS)** will be built within the boundaries of the farm. The construction of the substation will allow for the reduction of the number of export cables carrying electricity from the wind farm to the shore, and will significantly reduce transmission losses.

As part of the BIII OWF, a substation will be constructed, being either a transformer substation – collecting alternating current (AC) from wind turbines, and then changing its voltage (33 or 66 kV) to a correspondingly higher level, enabling its further transmission in the alternating current technology; or a substation combining the transformer function with the converter function (AC/DC) – converting alternating current (AC) into direct current (DC), enabling its further transmission in the direct current technology.

At the present stage of the project, no decision has yet been taken on whether to transmit electricity to the shore in the direct current or alternating current technology.

Infrastructure for the transmission of electricity to the shore (i.e. offshore and onshore export cables, onshore substation and possible additional OSs) will form a separate, independent project to construct the offshore transmission infrastructure ("OTI"), subject to a separate environmental impact assessment procedure.

AC offshore transformer station will be built on a platform based on monopile, jacket, tripod or gravity-base foundations. The necessary power and staff welfare infrastructure will be installed on the working platform.

Typical OS AC equipment consists of the following components: an indoor switchgear, power transformers, MV and HV switchgears, reactive power compensation reactors and capacitors, transformers or power generators to provide backup power, earthing system, control panel of internal systems, low-voltage distribution equipment for auxiliary equipment and protection, control and instrumentation systems, UPS uninterruptible power supply, SCADA equipment, service staff accommodation, rest and welfare rooms, material storage, workshop, boat landing, helideck, occupational health and safety as well as emergency equipment including Diesel generators, emergency lighting, lifeboats.

Offshore AC/DC converter station will be built as an additional station, in addition to the transformer stations described above, if the Investor decides to use DC transmission technology. It may be constructed as a separate facility or as an additional element of the AC substation, which will take place if such a transmission technology is selected.

Electricity from the AC transformer substations will be transmitted to the AC/DC converter substation. The task of the substation will be to convert alternating current (AC) into direct current (DC) and possibly to increase voltage in order to prepare it for further transmission to the shore. The AC/DC converter station will be constructed on the basis of a platform embedded on a monopile, jacket, tripod or gravity-base foundation. The necessary power infrastructure will be installed on the working platform, in particular equipment for converting alternating current into direct current.

The main components of the converter station include: converter transformers, converter thyristors, harmonic filters, capacitor batteries, reactive power compensation reactors, external pumping station (cooling system).

The implementation of the Project may be carried out in stages, of which the first stage will cover the capacity in the range of 600–720 MW. The first stage is planned for implementation in the years 2024–2027. Implementation of subsequent stages will depend on the investment decisions made based on the current market conditions. The total construction time for the first stage will be up to 3.5 years. The time of construction of subsequent stages will depend on the decision regarding their size (number of wind turbines) and available technologies and equipment for the construction of offshore wind farms.

As the offshore wind energy industry is developing very dynamically, and new models of wind turbines and other equipment appear every year, so the project may use models of turbines that are not currently available on the market. For the above reasons, the environmental impact assessment was carried out on the basis of the envelope of technical parameters, which defined the worst case scenarios of environmental impacts of particular technological solutions. Also, the final technical parameters of every individual piece of farm equipment cannot be specified at this stage of issuing the decision on environmental conditions, but only upon issuing the building permit. However, the authority responsible for issuing the building permit shall be bound by the provisions of this decision on environmental conditions.

2) in point I.3. entitled Requirements regarding environmental protection, necessary to be taken into account in the building permit design:

a) point I.3.1), reading as follows:

Design up to 120 wind turbines with a minimum clearance between the lower rotor blade position and the sea surface (mean sea level) of no less than 20 m, rotor diameter of no more than 200 m, and total structure height of no more than 275 m above the sea level;

to be replaced with:

Design up to 60 wind turbines with a minimum clearance between the lower rotor blade position and the sea surface (mean sea level) of no less than 20 m, rotor diameter of no more than 250 m, and total structure height of no more than 310 m above the sea level;

b) point I.3.2), reading as follows:

Design a maximum of 6 substations and 200 km of internal sections of power cables;

to be replaced with:

Design a maximum of one substation and 200 km of internal sections of power cables;

c) point I.3.3), reading as follows:

Assume maximum density of the wind turbines of 1.35 pcs/km²;

to be replaced with:

Maintain minimum distances between the individual wind turbines of 800 m from the axis of individual structures;

d) point I.3.4), reading as follows:

Assume a maximum zone for a single rotor of no more than 31,400 m², and a total maximum zone for all rotors of no more than 3,768,000 m²;

Assume a maximum zone for a single rotor of no more than 49,088 m², and a total maximum zone for all rotors of no more than 2,945,244 m²;

e) point I.3.5), reading as follows:

In the design, the selection of the foundation type from among the following types: monopiles, gravity-base foundations, jacket or tripod foundations shall be assumed and justified;

to be replaced with:

In the design, the possibility of using two types of foundations shall be assumed: monopiles or jacket foundations, whereas for the foundation for the substation it is possible to use one of four types of foundations: monopiles, gravity-base foundations, jacket or tripod foundations. The selected type of foundations should be justified in detail;

f) point I.3.6), reading as follows:

Assume the maximum seabed area occupied by one foundation (without any possible scour protection layer) of no more than 1,257 m², and the total maximum seabed area occupied by all foundations of no more than 158,382 m²;

to be replaced with:

The maximum seabed area occupied by one foundation (without any possible scour protection layer) for a wind turbine may not exceed 79 m² and for an offshore substation may not exceed 1,964 m², and the total maximum seabed area occupied by all foundations may not exceed 6,676 m².

The building permit design should specify a scour protection layer which will have the least

possible impact on the seabed and benthos;

3) in point II.1. entitled To impose on the Applicant the following obligations: Obligations of the applicant in the scope of actions minimizing and mitigating negative environmental impact:

a) point II.1.A1) (...) related to the need to reduce the noise generated during piling works, reading as follows:

Design and apply technical solutions in the form of air curtain or other technology, minimizing the impact of underwater noise on fish and marine mammals, guaranteeing such reduction of its level so that at the boundary of the nearest Natura 2000 site, protecting marine mammals, i.e. Ostoja Słowińska PLH220023, is not higher than 171 dB re 1 μPa^2 s (SEL, in water).

Incidental exceeding of this level should be reported to the Regional Director for Environmental Protection in Gdańsk within 7 days from its occurrence. In the notification, it is essential to indicate the mitigation measures taken by the Applicant and confirm their effectiveness.

to be replaced with:

Design and apply technical solutions in the form of air/bubble curtain or other technology, minimizing the impact of underwater noise on fish and marine mammals, guaranteeing such reduction of its level so that: it is not higher than 140 dB re 1 $\mu\text{Pa}^2\text{s}$ SELcum and weighted by the weighing function for cetaceans with high sensitivity to very high frequency (VHF) sounds for porpoises and not higher than 170 dB re 1 $\mu\text{Pa}^2\text{s}$ SELcum and weighted by the weighing function for seals (PVC) for seals at the boundary of the Natura 2000 site Ostoja Słowińska PLH220023.

Incidental exceeding of this level should be reported to the Regional Director for Environmental Protection in Gdańsk within 7 days from its occurrence.

In the notification, it is essential to indicate the mitigation measures taken by the Applicant and confirm their effectiveness.

b) point 11.1. B) (...) related to the need to reduce the impact on birds, reading as follows: *It is allowed to build up to 120 wind turbines with a minimum clearance between the lower rotor blade position and the sea surface (mean sea level) of no less than 20 m, rotor diameter of no more than 200 m, and total structure height of no more than 275 m above the sea level;*

to be replaced with:

It is allowed to build up to 60 wind turbines with a minimum clearance between the lower rotor blade position and the sea surface (mean sea level) of no less than 20 m, rotor diameter of no more than 250 m, and total structure height of no more than 310 m above sea level;

c) in point 11.1.B) (...) related to the need to limit the impact on birds, after number 5, number 6 shall be added, reading as follows:

6) leave the possibility of locating the above-water elements of the farm in the north-western boundary of the water region intended for the farm construction; assume the area approved for development with above-water elements in accordance with the coordinates presented in the table below:

Table 3. Geographic coordinates of the boundaries of the BIII OWF development area with above-water elements

Point	ETRS89 Poland CS92	
	Longitude	Latitude
1	17° 21' 21,473" E	54° 57' 21,518" N
2	17° 17' 17,639" E	54° 57' 0,529" N
3	17° 15' 28,399" E	55° 0' 39,156" N
4	17° 17' 36,907" E	55° 2' 5,406" N
5	17° 30' 31,280" E	54° 59' 50,060" N
6	17° 24' 36,771" E	54° 57' 39,861" N
7	17° 22' 38,491" E	54° 57' 25,473" N
8	17° 21' 23,133" E	54° 57' 21,632" N
9	17° 21' 22,998" E	54° 57' 21,625" N
10	17° 21' 22,510" E	54° 57' 21,596" N
11	17° 21' 22,023" E	54° 57' 21,562" N
12	17° 21' 21,537" E	54° 57' 21,524" N

d) in point II.1.E) a. (...) related to the need to ensure environmental safety in the event of unplanned events at the construction and decommissioning stage, after number 15), number 16) and 17) shall be added, reading as follows:

- 16) perform visual observations of the presence of marine mammals in the period of preparation and performance of operations of removing the unexploded ordnance from the seabed (detonation). Observations should be carried out from appropriate observation platforms on vessels with the possibility of a wide field of observation in the direction in front of the vessel. Observations should be conducted in periods of good visibility. If marine mammals are recorded in the zone of potential impact, the operations shall be suspended until the recorded individuals leave the zone;
- 17) use marine mammals scaring devices prior to the commencement of seabed cleaning operations by a controlled explosion of unexploded ordnance by authorized entities. The range and effectiveness of the devices should be adapted to the range of potential impacts related to the explosive detonation, detonation place and season. Allow for effective dispersal in an area subject to PTS in porpoises and seals;

f) in point II.2.a. (...) concerning the monitoring of bats at the operation stage, reading as follows: *The monitoring of bat activity should be carried out during the first five years of the farm operation, covering at least three seasons. The surveys should cover the first two years of the farm operation, and the last season of surveys may be carried out at a later date, but not exceeding the period of 5 years of operation of the project.*

The monitoring should consist of two elements: bat mortality surveys and monitoring of bat activity in the vicinity of wind turbines. The equipment used should allow automatic recording and meet the minimum requirements for equipment used in the pre-investment monitoring. Monitoring shall be carried out in the period covering spring and autumn migrations. The number and arrangement of recorders shall be determined after determining the turbine distribution on the surface; the number of recorders may not be lower than 6.

Where the results of the monitoring show significant negative impacts on bats or significant hazards, appropriate mitigation or preventive measures should be specified and applied, including periodic shutdowns of turbines.

to be replaced with:

The monitoring of bat activity should be carried out during the first five years of the farm operation, covering at least three seasons. The surveys should cover the first two years of the farm operation, and the last season of surveys may be carried out at a later date, but not exceeding the period of 5 years of operation of the project.

The monitoring should include a survey of bat activity near wind turbines. The equipment used should allow automatic recording and meet the minimum requirements for equipment used in the pre-investment monitoring. Monitoring shall be carried out in the period covering spring and autumn migrations. The number of recorders may not be less than 6, distributed on the first line of the wind turbine on the western and southern boundary of the BIII OWF area.

Where the results of the monitoring show significant negative impacts on bats or significant hazards, appropriate mitigation or preventive measures should be specified and applied, including periodic shutdowns of turbines.

g) point IV. entitled: To find it necessary to carry out a reassessment of the environmental impact as part of the procedure for the issuance of the building permit decision, with particular emphasis on the following reading as follows:

To find it necessary to carry out a reassessment of the environmental impact as part of the procedure for the issuance of the building permit decision, with particular emphasis on the following:

- 1. determination of the width and significance of the designated safety zones around individual wind turbines for migration of birds and bats;*
- 2. determination of the width of migration corridors between the water regions intended for the construction of offshore wind farms of different investors; if the results of analyses indicate a scientifically justified need to determine migration corridors along the boundaries between the water regions intended for the construction of offshore wind farms of different investors, the proposals concerning this corridor included in the environmental impact reassessment report should be based on a guideline that the axis of the indicated corridor would coincide with the line, which divides these water regions, or if the course of the corridor due to scientific reasons is different, the axis of this corridor should be determined so that it would cause similar or comparable economic results for the farms in these water regions, with possibly the lowest costs for the environment;*
- 3. analyses of adopted methods of foundation and assessment of the process impact on individual components of the natural environment;*
- 4. determination of the impact of individual turbines and other farm elements' layout on the surface, on the availability of this area for animals, including, in particular, seabirds and marine mammals, and determination of the impact on long-distance and local bird flight paths;*
- 5. proposal of solutions minimizing the impact of noise and reducing the range of this impact;*
- 6. determination of the number and location of bat activity recorders in the farm area.*

to be replaced with:

It shall be pointed out that the environmental impact assessment of the project does not indicate the need to conduct an environmental impact assessment as part of the procedure for issuing a building permit.

The local authority does not deem it necessary to reassess the environmental impact of the project in question. The information contained in the environmental impact assessment report is sufficient to determine the conditions for the building permit design.

The above does not preclude a reassessment of the project environmental impact if:

- the entity planning to undertake the project submits an application to the authority competent to issue the decision;
- the authority competent to issue the aforementioned decision determines that the application for the decision has been amended in relation to the requirements specified in the decision on environmental conditions.

- II. The Project characteristics shall constitute Appendix No. 1 to this decision.
- III. Pursuant to Article 76 section 1 point 1 of the Act of December 17, 2020 on promoting electricity generation in offshore wind farms (Journal of Laws of 2022, item 1050), the decision is enforceable immediately.
- IV. The remaining part of the decision of the Regional Director for Environmental Protection in Gdańsk of July 07, 2016, ref. No.: RDOŚ-Gd-WOO.4211.12.2015.KP.22 **shall remain unchanged.**

GROUNDS

On June 13, 2022, the Regional Director for Environmental Protection in Gdańsk received application ref. No.: MFWBIII-034/2022/AM of MFW Bałtyk III Spółka z o.o. with its registered office in Warsaw, acting through the representative Ms. Anna Marczak, for the change of the decision on environmental conditions ref. No.: RDOŚ-Gd-WOO.4211.12.2015.KP.22 of July 7, 2016, issued by the Regional Director for Environmental Protection in Gdańsk (“Environmental Decision”), for the project entitled “**Construction of the Bałtyk Środkowy III Offshore Wind Farm**” (hereinafter referred to as BIII OWF).

The application was enclosed with an appropriate number of copies, required by Article 74 section 1 of the Act of October 3, 2008, on access to information on the environment and its protection, public participation in environmental protection and on environmental impact assessments (*consolidated text, Journal of Laws of 2022, item 1029, as amended*) – hereinafter referred to as the EIA Act:

- 1) environmental impact assessment report for the change of the decision on environmental conditions, Bałtyk Środkowy III Offshore Wind Farm prepared by Kancelaria Radców Prawnych Otawski, Dziura, Jędrzejewski i Troszyński Sp. p., Warsaw, June 2022, hereinafter referred to as the EIA Report;
- 2) map in the scale guaranteeing the legibility of the presented data, with a marked planned area where the project will be implemented and with a marked planned area on which the project will have an impact, together with a record of the map in an electronic form.

The subject of the project is the construction of the Bałtyk Środkowy III OWF with a power output of up to 1200 MW. The Bałtyk Środkowy III Offshore Wind Farm will consist of up to 60 wind turbines and one internal offshore substation as well as submarine power and telecommunication cables.

While justifying the need to change the above-mentioned Environmental Decision, the Investor explained that the proposed changes do not preclude any provision of law and that these changes do not lead to a violation of the public interest. The applied-for changes take into account the minimization of the occurrence of negative effects on people and the

environment related to the project implementation and operation. In the above-mentioned application, the Investor emphasized that the proposed change to the Environmental Decision does not, in any respect, lead to a reduction of the protection level in relation to any aspect of the environment related to the principles established by the previous content of this decision, but, on the contrary, it ensures a higher level of protection against potential impacts.

Moreover, the Investor indicated that the proposed change is fully compliant with the social interest related to the need of urgent provision of new generating capacities in the Polish power system, as well as fulfillment of the requirements of the European Union law related to the increase in the share of renewable sources in the entire energy mix of Poland and reduction of greenhouse gas emissions. In addition, as highlighted by the Investor, the justification for the change to the Environmental Decision is not only the public interest but also the legitimate interest of the party. As indicated by the Investor, shortening of the entire process will allow for increasing the cost-effectiveness of the project and will allow for quicker commencement of the project operation stage, shortening the period during which the project does not allow for generating profit and entails costs. First of all, however, as indicated by the Investor, the proposed changes to the Environmental Decision will contribute entirely to the reduction of impacts caused during the implementation, operation and decommissioning of the planned project.

In view of the above, acting on the basis of Article 155 of the Code of Administrative Procedure, in conjunction with Article 87 of the EIA Act, the Regional Director for Environmental Protection in Gdańsk, by virtue of letter ref. No.: RDOŚ-Gd-WOO.420.41.2022.AM.1 of June 15, 2022, notified the parties to the procedure about the submission of an application for the change of the environmental decision and initiation of the said procedure, as well as about the possibility of reading the case documents and submit comments and applications if any. The Applicant did not request to cover any of the documents presented with the submission or during the procedure with confidentiality clause.

Information about the submitted application has been posted in the publicly available *Ekoportal* data list (www.ekoportal.pl), maintained on the basis of Article 22 of the EIA Act, under number 208/2022.

The planned project is qualified in accordance with **§ 2 section 1 point 5** of the Regulation of the Council of Ministers of September 10, 2019, on projects that may have a significant impact on the environment (Journal of Laws of 2019, item 1839, as amended) as: *“plants using wind energy for the generation of electricity with a total nominal power output of the farm of not less than 100 MW and located in the maritime areas of the Republic of Poland”*.

The project will be located in the southern part of the Baltic Sea, in the Polish Exclusive Economic Zone, approx. 23 km north of the coastline, at the level of the municipality of Smołdzino and the urban municipality of Łeba (Pomeranian Voivodship). Bearing in mind that the project may exert a permanent impact on the environment and due to its location in a maritime area, pursuant to Article 75 section 1 point 1), subpoint c) of the EIA Act, the authority competent to analyze the case is the Regional Director for Environmental Protection in Gdańsk. Pursuant to Article 59 section 1 point 1) of the EIA Act, the implementation of the planned project likely to create a permanent significant environmental impact, requires mandatory performance of the project environmental impact assessment.

Since the provisions of Article 155 of the Code of Administrative Procedure and Article

87 of the EIA Act apply to the change to the decision on environmental conditions, therefore, pursuant to them, the provisions on obtaining the decision on environmental conditions shall apply accordingly to the change of the decision on environmental conditions. Consequently, a change to the decision on environmental conditions for a project for which an environmental impact assessment is required requires an environmental impact assessment to assess the impact of the updated conditions of project implementation and operation on the previously assessed environmental impacts.

Therefore, in view of the above, in the case in question, it is required, i.a., to approve the conditions of implementation of the project in question with the Director of the Maritime Office in Gdynia pursuant to Article 77 section 1 point 1) of the EIA Act and to seek the opinion of the State Border Sanitary Inspector in Gdynia pursuant to Article 77 section 1 point 2) of the EIA Act. Pursuant to Article 6 of the EIA Act, the requirement for approval or providing opinion does not apply if the authority in charge of the procedure is also the approving authority or authority providing the opinion.

In view of the above, by virtue of the letter ref. No.: RDOŚ-Gd-WOO.420.41.2022.AM.2 of June 15, 2022, the local authority applied to the Director of the Maritime Office in Gdynia for approval of the implementation conditions of the project in question. The Director of the Maritime Office in Gdynia, by virtue of decision ref. No.: INZ.8103.92.2022.IK of July 14, 2022, approved the terms and conditions of implementation of the project in question as regards the changes requested by the Investor, with the following comments:

1. The provision concerning cable protection, specified in point 1.1. of the environmental decision of July 7, 2016, ref. No.: RDOŚ-Gd-WOO.4211.12.2015.KP.22 shall be unambiguously compliant with § 54 section 7 point 4 letter b of the Regulation of the Council of Ministers of April 14, 2021, on the adoption of the spatial development plan for internal sea waters, the territorial sea and the exclusive economic zone at a scale of 1:200,000 (Journal of Laws of 2021, item 935) (Appendix No. 2 to the Regulation – Detailed Decisions).
2. Point I.3.6 of the decision on environmental conditions (of July 7, 2016, ref. No.: RDOŚ-GD-WOO.4211.12.2015.KP.22) should be amended in accordance with the proposal of the applicant and the following provision should be added: "The building permit design should specify a scour protection layer which will have the least possible impact on the seabed and benthos".

The above was taken into account in the content of the decision.

By virtue of the letter ref. No.: RDOŚ-Gd-WOO.420.41.2022.AM.2 of June 15, 2022, in turn, the Regional Director for Environmental Protection in Gdańsk applied also for an opinion from the State Border Sanitary Inspector in Gdynia, who provided the opinion about the implementation conditions of the project in question in letter ref. No.: SE.ZNS.80.4912.6.22 of July 18, 2022.

The environmental impact assessment report for the project in question, submitted together with the application for the change of the Environmental Decision, was prepared for the needs of the procedure conducted under Article 87 of the EIA Act in conjunction with Article 155 of the Code of Administrative Procedure, and thus it focuses on the changes planned to be implemented in the project, i.e. the Bałtyk Środkowy III OWF, and consequently on the modifications that must be implemented into the decision on environmental conditions in order for the planned changes in the Bałtyk Środkowy III OWF to take place.

The report has been listed in the publicly available Ekoportal list (<http://www.ekoportal.pl>) under the number 402/2022.

The environmental impact assessment of the Project update carried out in the submitted EIA Report takes into account, among others, changes in the actual state, including, in particular, changes related to the new knowledge in the scope of impacts of offshore wind farms and related to the development of other offshore wind farm projects in the Polish maritime areas. The update of the Project parameters is related primarily to the development of the project, which allows to significantly specify the technical parameters of the Project.

Pursuant to Article 79 of the EIA Act, prior to issuing the decision on environmental conditions, the authority competent to issue this decision ensures the possibility for the public to participate in the procedure under which the environmental impact assessment is to be conducted.

Consequently, the local authority published information in the form of announcement ref. No.: RDOŚ-Gd-WOO.420.41.2022.AM.3 of August 8, 2022, information specified in Article 33 of the EIA Act, in particular, on the possibility of submitting comments and applications, indicating the place and a 30-day deadline for their submission (from August 16, 2022 to September 14, 2022 inclusive). The announcement was posted on the local authority's website (www.gov.pl/web/rdos-gdansk) and on the notice board in the authority's headquarters. In addition, the aforementioned announcement was submitted to the following officials for publication: the Director of the Maritime Office in Gdynia, the Mayor of Gdańsk, the Mayor of Gdynia, the Mayor of Sopot, the Head of Ustka Municipality, the Mayor of Ustka, the Head of Smołdzino Municipality, the Mayor of Łeba, the Head of Wicko Municipality, the Head of Choczewo Municipality, the Head of Krokowa Municipality, the Mayor of Władysławowo, the Mayor of Jastarnia, the Mayor of Hel, the Head of Puck Municipality, the Mayor of Puck, the Head of Kosakowo Municipality, the Head of Stegna Municipality, the Head of Sztutowo Municipality, and the Mayor of Krynica Morska.

In each of the above-mentioned places, the announcement of public disclosure of information about the project in question was posted for 30 days. No requests or comments from the public were submitted for the procedure with the participation of the public within the specified time limit.

Having analyzed the evidence gathered in this case, the local authority found and considered as follows:

The project in question consists in the construction of the Bałtyk Środkowy III Offshore Wind Farm in modified parameters proposed as part of the procedure in question for the change of the decision on environmental conditions. The option approved by the Environmental Decision included the construction of 120 wind turbines, whereas the option being the subject of this procedure provides for the construction of **60** wind turbines. In view of the above, changes in the description of the project are related mainly to the specification of the option selected for implementation, resulting from the progress of design works, including the preparation of the preliminary development plan and selection of the foundation technology.

The option selected for implementation by the Investor is that based on the turbines with the highest capacity, which are planned to be introduced to the market in 2024–2027, when the implementation is scheduled. These will be 12+ MW class turbines. This will be no more than 60 wind turbines. The justification for the selection of this option is that it ensures

the maximum degree of achieving the objective of the project in question, i.e. the highest efficiency of electricity generation, while optimizing the costs related to the construction of a smaller number of wind turbines, shorter construction time, demand for a smaller number of vessels, construction back-up facilities and, at the operation stage, lower maintenance needs. Also, the decommissioning of a farm with a smaller number of wind turbines will be less expensive. Higher electricity generation also means achieving a greater environmental effect of replacing fossil fuels and reducing CO₂ emissions by the energy sector. At the same time, thanks to the reduction in the number of wind turbines, the parameters of the project essential for the scale of environmental impacts, such as the total area of rotors and occupation of the seabed, will be reduced.

The detailed implementation option ("IO") for the BIII OWF will consist of the following elements:

- Up to 60 wind turbines of 12 MW+ class, the basic components of which are: foundation, tower, nacelle with a power generator, and rotor;
- 1 internal offshore substation ("OS");
- submarine power and telecommunication cables connecting: the wind turbines with each other (into cable circuits), and groups of wind turbines with the internal offshore substation.

In the option selected for implementation, the application of monopile foundations is planned for all wind turbines as part of the Project. If it is not technically possible to construct such foundations for any of the planned wind turbines, it is planned to use jacket foundations. In the case of the offshore substation, at the current stage it is not possible to limit the type of the considered foundations. In view of it, the internal offshore substation may be founded on a monopile, tripod, jacket (truss) or gravity-base foundation. The final decision on the foundation method will be specified in the building permit design, based on the surveys of geotechnical conditions adapted to the selected types of generators and substations.

The parameters of the requested option selected for implementation of the BIII OWF, compared to the Project parameters approved by the Environmental Decision are presented in the table below:

Table 4. Parameters of the requested option selected for implementation of the BIII OWF, compared to the parameters of the option approved by the Environmental Decision.

Parameter	Option selected for implementation	Option approved by the Environmental Decision (alternative option)
Maximum total height of the wind turbine a.s.l. [m]	310	275
Minimum clearance between the lower blade position and the sea surface [m]	20	20
Maximum rotor diameter [m]	250	200
Maximum number of wind turbines [pcs]	60	120
Maximum zone for a single rotor [m ²]	49,088	31,400
Maximum total zone for the rotors [m ²]	2,945,244	3,768,000
Maximum number of accompanying infrastructure foundations [pcs]	1	6
Types of wind turbine foundations	Foundations: monopile and jacket	Foundations: monopile, tripod, jacket

considered	(truss) foundations	(truss) foundations and gravity-base foundations
Maximum seabed area occupied by 1 foundation of a wind turbine [m ²]	79	1257
Types of accompanying infrastructure foundations considered	Foundations: monopile, tripod, jacket (truss) foundations and gravity-base foundations	Foundations: monopile, tripod, jacket (truss) foundations and gravity-base foundations
Maximum seabed area occupied by 1 foundation of accompanying infrastructure [m ²]	1,964	1,257
Highest density of wind turbines [pcs/km ²]	Not applicable	1,35
Minimum distance between wind turbines (counting from the axis of individual structures) [m]	800	The parameter not specified in the decision
Maximum seabed area occupied by all foundations [m ²]	6,676	158,382
Maximum cable length of the farm internal connection infrastructure [km]	200	200

* the parameter was replaced with the minimum distance between wind turbines (counting from the axis of individual structures), source: EIA Report

The most significant difference in the option selected for implementation, compared to the reasonable alternative option, is the reduction in the number of wind turbines by 50%, i.e. to a maximum of 60 units, compared to the 120 units initially envisaged for implementation in the Environmental Decision.

Reduction in the number of wind turbines and limitation of the types of their foundations (monopile and jacket (truss) foundations) in the implementation option is essential from the point of view of the farm's impact on key elements of the environment, as the following is reduced along with it:

- the area of the seabed occupied by the foundations in relation to the option approved by the Environmental Decision, by approx. 95.8 %, as well as the volume of seabed sediments disturbed during construction and moving together with sea currents as well as destruction of benthic organisms during installation works;
- the total rotor surface area in relation to the option approved by the Environmental Decision, by about 21.8 %, and thus the estimated bird and bat mortality resulting from collisions with the operating wind turbines;
- the total time of the foundation installation and, consequently, the period during which underwater noise will be emitted which may cause hearing damage and scaring (in extreme cases, even death) of fish and marine mammals.

Thus, it is anticipated that the option selected for implementation is safer for the environment than the original implementation option approved by the Environmental Decision.

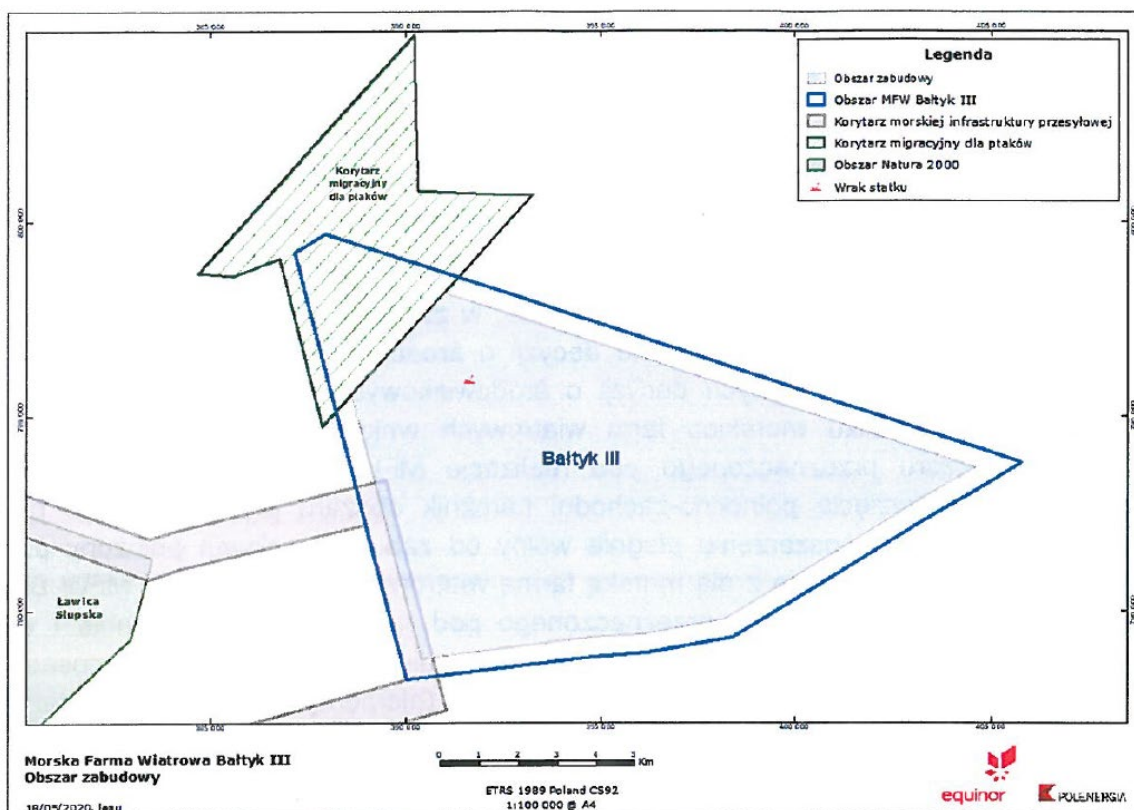
As indicated in the submitted EIA Report in connection with the performance of design works and due to the procedure for the issue of the decision on environmental conditions and rulings in the form of issued decisions on environmental conditions for other offshore wind farms located in the vicinity, the applicant specified in detail the area intended for the implementation of the BIII OWF. The north-western corner of the area intended for its implementation was excluded from the development with elements of the Project, thanks to which the undeveloped water region located between the planned farm and the neighboring Baltica 2 OWF and Baltica 3 OWF will be extended. Therefore, the area intended for implementation has changed and will amount to approx. 94 km², whereas the area within which

it will be in fact possible to found the wind turbines (wind turbine development area (structural components) and rotor blade range area) – approx. 88 km². In accordance with the regulations of the Construction Law, the wind turbine development area should include all the wind turbine structural components, including rotors; the development area indicated above contains the foundations of wind turbines located therein and the area covering the width of the rotor radius.

As indicated in the submitted EIA Report, contrary to the environmental impact assessment report prepared for the purposes of the procedure on the decision on environmental conditions, during which the Environmental Decision was issued, the development area is understood as the area inside which all elements of the Project will be located; in the case of wind turbines it is determined by the range of rotors, and not only the area which may be used for installing the foundations for wind turbines. The consequence of adopting such an understanding (compliant with the requirements of the Construction Law) of the development area is the change in the area indicated as the development area in the submitted report in relation to the area indicated for the option approved by the Environmental Decision. The development area indicated in the option specified in the Environmental Decision and determined taking into account the provisions of the permit for erection and use of artificial islands, structures and devices in the Polish maritime areas issued for the Project (500 m buffer from the farm boundary without development), and taking into account an additional buffer with a width of 100 m (corresponding to the rotor radius) amounted to approx. 89 km². The development area proposed as part of this procedure for the change of the decision on environmental conditions is approx. 88 km², however, it is the total area taking into account not only the foundations of wind turbines, but also superficial elements of wind turbines, including rotors, and without excluding the area of safety zones around the shipwrecks. It should be emphasized that the change results from the adaptation of the nomenclature to that used under the Construction Law, and it does not result in the actual change in the area occupied by all components of the offshore wind farm.

The boundaries of the development area of the BIII OWF and the geographic coordinates of the development area of the BIII OWF are presented in Figure 1 and Table 5 below, respectively.

Figure 1. Boundaries of the development area of the BIII OWF (source: EIA Report)



EN	PL
Korytarz migracyjny dla ptaków	Migration corridor for birds
Ławica Słupska	Słupsk Bank
Bałtyk III	Bałtyk III
Legenda	Key
Obszar zabudowy	Development area
Obszar MFW Bałtyk III	Bałtyk III OWF area
Korytarz morskiej infrastruktury przesyłowej	Offshore grid connection infrastructure corridor
Korytarz migracyjny dla ptaków	Migration corridor for birds
Obszar Natura 2000	Natura 2000 site
Wrak statku	Shipwreck
Morska Farma Wiatrowa Bałtyk III Obszar zabudowy	Bałtyk III Offshore Wind Farm Development area
18/05/2020	18/05/2020

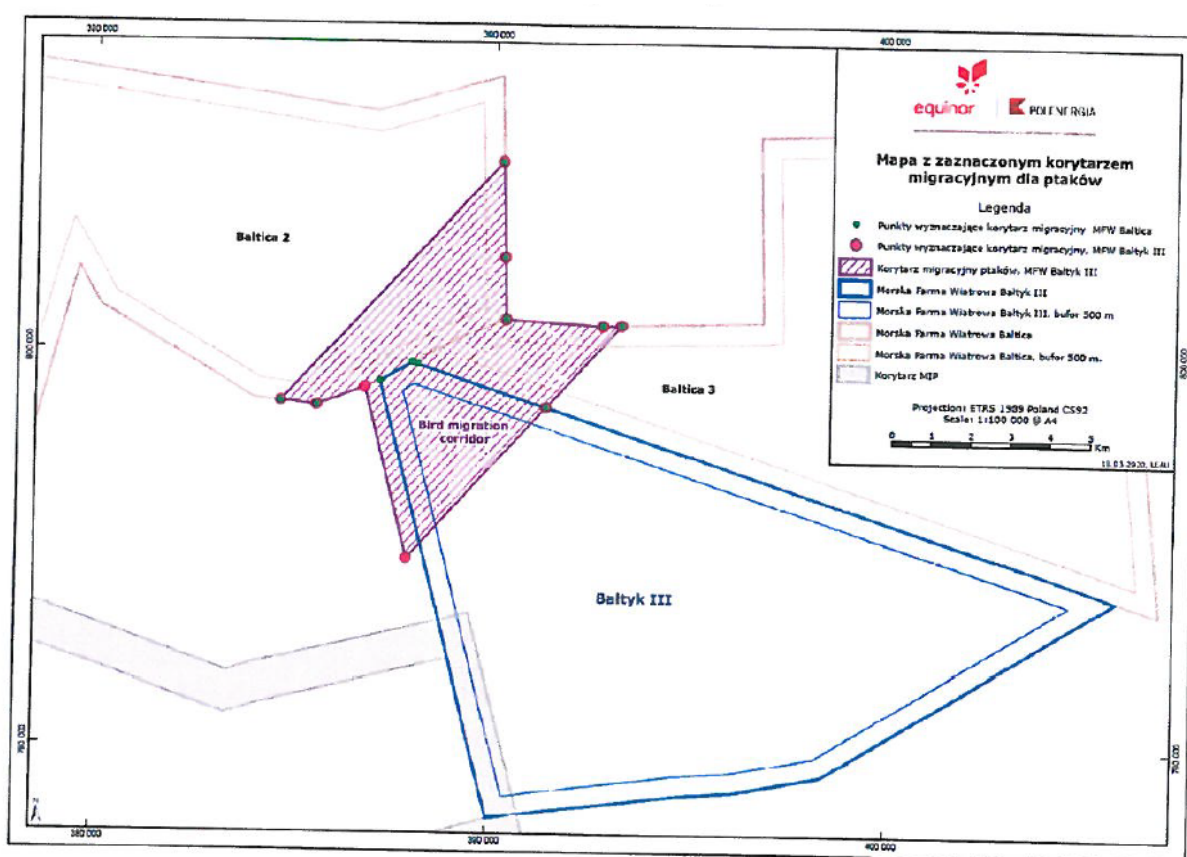
Table 5. Geographic coordinates of the boundaries of the development area of the BIII OWF (source: EIA Report)

Point	ETRS89_Poland_CS92ETRS89_Poland_CS92	
	Longitude	Latitude
1	17° 21' 21,473" E	54° 57' 21,518" N
2	17° 17' 17,639" E	54° 57' 0,529" N
3	17° 15' 28,399" E	55° 0' 39,156" N
4	17° 17' 36,907" E	55° 2' 5,406" N
5	17° 30' 31,280" E	54° 59' 50,060" N
6	17° 24' 36,771" E	54° 57' 39,861" N
7	17° 22' 38,491" E	54° 57' 25,473" N

8	17° 21' 23,133" E	54° 57' 21,632" N
9	17° 21' 22,998" E	54° 57' 21,625" N
10	17° 21' 22,510" E	54° 57' 21,596" N
11	17° 21' 22,023" E	54° 57' 21,562" N
12	17° 21' 21,537" E	54° 57' 21,524" N

The north-western corner of the area intended for its implementation was excluded from the development with elements of the Project, thanks to which the undeveloped water region located between the planned farm and the neighboring Baltica 2 OWF and Baltica 3 OWF will be extended.

Figure 2 Map with marked migration corridor for birds – the area excluded from development with wind turbines (source: EIA Report)

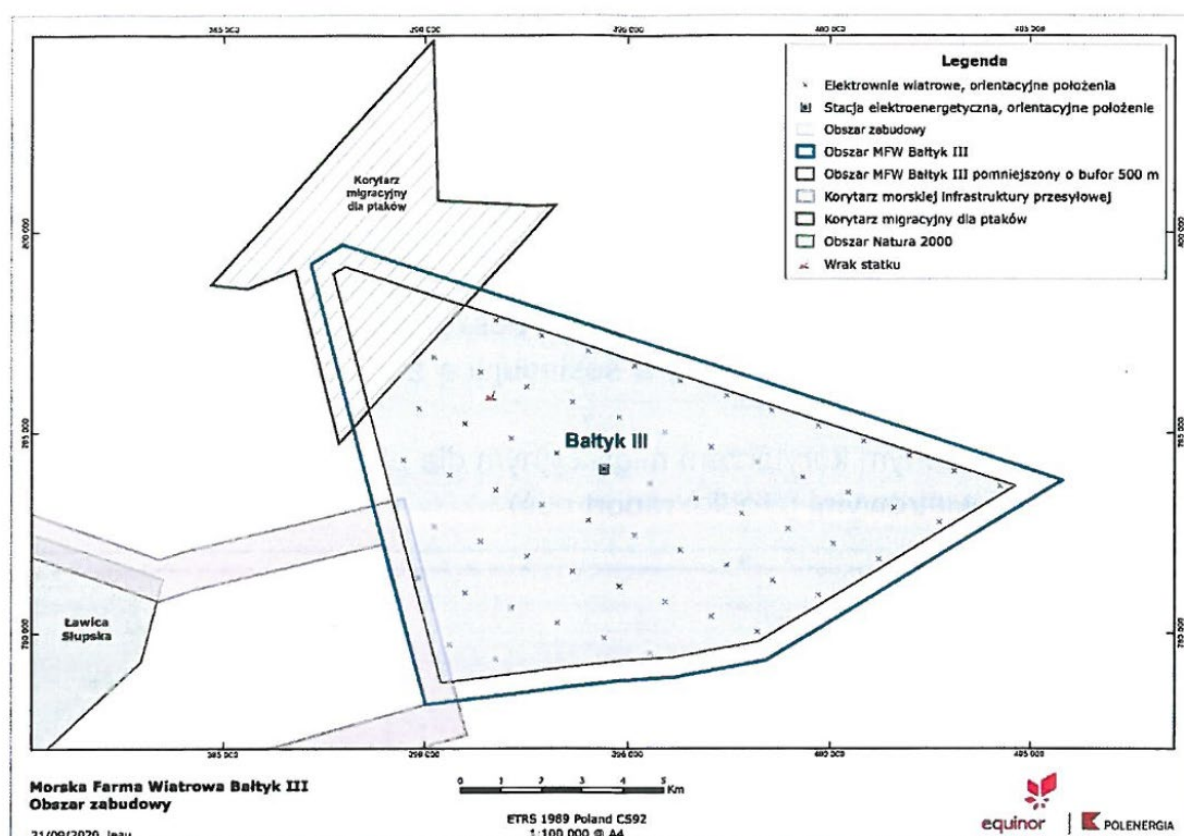


EN	PL
Bałtyk III	Bałtyk III
Mapa z zaznaczonym korytarzem migracyjnym dla ptaków	Map with marked migration corridor for birds
Legenda	Key
Punkty wyznaczające korytarz migracyjny MFW Baltica	Points determining the migration corridor of the Baltica OWF
Punkty wyznaczające korytarz migracyjny, MFW Bałtyk III	Points determining the migration corridor, Bałtyk III OWF
Korytarz migracyjny ptaków, MFW Bałtyk III	Bird migration corridor, Bałtyk III OWF
Morska Farma Wiatrowa Bałtyk III	Bałtyk III Offshore Wind Farm
Morska Farma Wiatrowa Bałtyk III, bufor 500 m	Bałtyk III Offshore Wind Farm, buffer of 500 m
Morska Farma Wiatrowa Baltica	Baltica Offshore Wind Farm

Morska Farma Wiatrowa Baltica, bufor 500 m.	Baltica Offshore Wind Farm, buffer of 500 m
Korytarz MIP	OTI corridor

Moreover, for the project in question, in the option selected for implementation, consisting in the construction of 60 wind turbines, a preliminary spacing of wind farm elements (development plan) was prepared, which is presented in Figure 3 below.

Figure 3. The planned spacing of the BIII OWF components in the option selected for implementation, assuming the construction of the maximum requested number of wind turbines (development plan), (source: EIA Report)



EN	PL
Korytarz migracyjny dla ptaków	Migration corridor for birds
Bałtyk III	Bałtyk III
Ławica Słupska	Słupsk Bank
Legenda	Key
Elektrownie wiatrowe, orientacyjne położenia	Wind turbines, approximate locations
Stacja elektroenergetyczna, orientacyjne położenie	Substation, approximate location
Obszar zabudowy	Development area
Obszar MFW Bałtyk III	Bałtyk III OWF area
Obszar MFW Bałtyk III pomniejszony o bufor 500 m	Bałtyk III OWF area minus 500 m buffer
Korytarz morskiej infrastruktury przesyłowej	Offshore grid connection infrastructure corridor
Korytarz migracyjny dla ptaków	Migration corridor for birds
Obszar Natura 2000	Natura 2000 site
Wrak statku	Shipwreck
Morska Farma Wiatrowa Bałtyk III Obszar zabudowy	Bałtyk III Offshore Wind Farm Development area

When preparing the preliminary development plan, the results of the performed: wind measurements and productivity analyses, preliminary geological surveys, preliminary technical analyses, previous results of environmental impact assessments carried out in the area of the BIII OWF and on neighboring projects were taken into account.

The development plan was based on the following key assumptions:

- planned number of wind turbines – 60;
- minimum distances between wind turbines – 800 m;
- distribution of wind turbines in a manner ensuring the creation of corridors for the safe movement of vessels, service and rescue vessels through the farm;
- location of internal offshore substation (“OS”) in the central part of the farm;
- laying of inner array export cables along corridors radiating from the OS to individual wind turbines, whereas these cables will connect from 5 to 6 wind turbines within one corridor; laying the export cable in corridors connecting the internal OS with the crossing points of the corridor created for the export cable (permit for laying and maintaining submarine cables in the exclusive economic zone for the project entitled “External grid connection infrastructure of the Bałtyk Środkowy III Offshore Wind Farm” issued by decision No. MFWK/1/13 of July 19, 2013, ref. No.: GT7pb/62/14823/decyzja/2013) with the BIII OWF’s boundary specified by the PSZW, without crossing the export cable with the inner array cables of the farm;
- leaving the area located in the north-western corner of the farm undeveloped with wind turbines, in such a way that a corridor with a width of 5 km, undeveloped with wind turbines, intersecting the areas of the Bałtyk Środkowy III OWF and Baltica 2 OWF and Baltica 3 OWF in the SW-NE direction, is created along the entire length.

In developing the plan, account was also taken of the result of the consultation with the Maritime Search and Rescue Service in order to provide safe corridors for sailing and flying maritime rescue vessels.

As indicated in the presented EIA Report, the above-mentioned development plan for the BIII OWF may be subject to addition of further details and modifications, due to the specific requirements of adjusting the project to the selected generators, to the geotechnical conditions of the foundations in the locations of the planned farm elements as set forth in the complete geological survey, to the arrangements on the building permit design with competent authorities and institutions, including technical expert opinions in terms of maritime safety. As indicated in the EIA Report, the key assumptions for the arrangement of farm elements, specified above, will be maintained.

The implementation of the project in question may be carried out in stages, of which the first stage will cover the capacity up to 720 MW. The first stage is planned for implementation in the years 2024–2027. Implementation of subsequent stages will depend on the investment decisions made based on the current market conditions. The total construction time for the first stage will be up to 3.5 years. The time of construction of subsequent stages will depend on the decision regarding their size (number of wind turbines) and available technologies and equipment for the construction of offshore wind farms.

In the course of the impact assessment carried out in the Report 2015, the possibility

of impact of the BIII OWF on bird and mammal species being the subject of protection of Natura 2000 sites, located within the boundaries of potential impact areas related to the implementation, operation or decommissioning of the BIII OWF, was assessed. The proper assessment was conducted in relation to 4 bird species, i.e. razorbill, long-tailed duck, common scoter and velvet scoter subject to protection in at least one of the nearby Natura 2000 sites (Słowińska Refuge, Słupsk Bank, Coastal Waters of the Baltic Sea or the Pomorska Bay) and 2 mammal species protected by the Natura 2000 site Słowińska Refuge.

As indicated in the submitted EIA Report, the changes proposed in the conditions of the Environmental Decision do not lead to changes in the conditions specified in the Environmental Decision and aimed at minimizing and mitigating environmental impacts. None of the proposed modifications results in the increased significance of the impact on the aforementioned subjects of protection of Natura 2000 sites (but also on any other subjects of protection of Natura 2000 sites), while some of them have a positive impact through reducing impacts or introducing solutions which will have an additional action to mitigate the resulting impacts.

In particular, it should be indicated that:

- a) reduction in the number of wind turbines will lead to:
 - shortening the time of exposure of mammals to noise emission related to piling of foundations at the construction stage;
 - reduction in the probability of bird collision with wind turbines at the operation stage;
- b) limitation of the types of foundations used for the wind turbine foundation to monopile or jacket foundations will lead to:
 - reduction in the area of destroyed benthic habitats;
 - reduction in the significance of impacts relating to disturbance of seabed sediments and increased concentration of suspended matter in water caused thereby.

Moreover, it should be indicated that the proposed mitigation measures in the form of leaving the area located in the west-north corner of the farm undeveloped with wind turbines, in such a way as to create a passable 5 km wide corridor, undeveloped with wind turbines, crossing the areas of the Bałtyk Środkowy III OWF, Baltica 2 OWF and Baltica 3 OWF in the SW-NE direction, will lead to mitigation of the barrier effect for migratory birds, while guaranteeing, that the impacts on the integrity, coherence and subject of protection of Natura 2000 sites through impacts on migratory birds on overwintering areas being the subject of protection of the Słupsk Bank area will not be significant. The assessment performed in the Report 2015 concluded that there was no significant negative impact on the objects of the Natura 2000 sites protection, whereas the proposed modifications of the conditions of the Environmental Decision contribute to further reduction in the impact relating to the implementation, operation and decommissioning of the BIII OWF. Thus, the proposed modifications will not result in the possibility of significant adverse impacts on Natura 2000 sites.

However, due to the nature of the proposed changes in the conditions of the Environmental Decision, in particular, as a result of a significant reduction in the number of wind turbines, i.e. to 60 compared to 120 in the case of the Project parameters approved by the Environmental Decision, as well as due to the limitation of the acceptable types of foundations for the wind turbines, it should be emphasized that the cumulative impact with other projects, especially offshore wind farms, will be reduced in relation to the set of project

parameters approved by the Environmental Decision. An additional element that further affects the mitigation of the cumulative impacts is the introduction of solutions ensuring a minimum 5 km wide corridor free from any development with elements of wind farms between the BIII OWF and the Baltica 2 and Baltica 3 OWF infrastructure. This solution is consistent and constitutes a continuation for the undeveloped corridor implemented to the conditions of the decision on environmental conditions issued for the Baltica OWF – condition II.3.9 of the decision on environmental conditions, ref. No.: RDOŚ-Gd-WOO.4211.21.2017.MJ.PW.AJ.37. Consequently, the proposed changes in the Project parameters should be considered as contributing to the mitigation of the cumulative impacts of the implementation, operation and decommissioning of the BIII OWF.

When analyzing the validity of the change to the content of point IV of the Environmental Decision, the local authority took into account the scope of specification of the Project's parameters and the results of the environmental impact assessment of the detailed parameters of the Project and, at the same time, the validity of the preconditions indicated as the grounds for imposing the obligation to perform the reassessment.

As indicated in the submitted EIA Report, the introduced Project modifications not only fall within the previously defined environmental conditions of its implementation, but result in the limitation of the Project impacts by significantly reducing the number of infrastructure elements comprising the Project, both wind turbines and substations, and also in further specifying the remaining Project parameters. In particular, it should be emphasized that the types of foundations possible to be used for the purposes of the wind turbine foundation have been specified, i.e. monopile and jacket foundations. Due to the seabed varying depths in the water region intended for the implementation of the BIII OWF and the diversified geological conditions of the seabed, it is necessary to allow the use of both monopile and jacket foundations. At the same time, it should be emphasized that the conducted environmental impact assessment took into account the impact of the technology with more far-reaching effects, i.e. monopile foundations. Both in the case of noise emission caused by foundation piling and due to seabed occupation by the foundation, monopile foundations cause more far-reaching impacts from among the types of wind turbine foundations considered in the currently requested Project option. It should be emphasized that leaving it possible to use one of four types of foundations in relation to the substation foundation, i.e. apart from monopile and jacket foundations, also gravity-base foundations and tripod foundations, in combination with the reduction in the number of substations from 6 pieces to one, is irrelevant from the point of view of the results of the environmental impact assessment of the entire BIII OWF.

Among the specific Project parameters, there are also those used to determine spatial arrangement of individual infrastructure elements of the BIII OWF, both above-surface and subsurface elements – this applies to the wind turbines, substation and cables connecting individual elements of the BIII OWF. The submitted report prepared for the purpose of changing the Environmental Decision specifies the approximate location of the substation, the arrangement of cables connecting individual OWF elements and the planned layout of the wind turbines in the OWF area intended for the development of above-water elements of the farm. As indicated in the submitted EIA Report, the spatial arrangement of individual farm elements within the water region intended for the implementation of the OWF is irrelevant from the point of view of the impact on the size and impact significance. What is important in this case is the number of wind turbines, which in the case of the proposed modifications was reduced by 50%

in relation to the Project parameters approved in the Environmental Decision.

When analyzing the issues of significance of migration corridors for birds between the water regions intended for the implementation of offshore wind farms of various investors, as well as their widths, the submitted report indicated that as additional actions mitigating the barrier effect during bird migration, it is proposed to introduce a modification which would exclude the north-western corner of the water region intended for the implementation of the BIII OWF from development with wind turbines. This solution is consistent and constitutes a continuation for the undeveloped corridor implemented to the conditions of the decision on environmental conditions issued for the Baltica OWF. Additional actions mitigating the impacts relating to the barrier effect, consisting in the establishment of corridors undeveloped with wind turbines, are provided for in the Environmental Impact Assessment Report for the Baltic Power project and assume leaving an area undeveloped with wind turbines between the Baltic Power OWF and the Baltica 3 OWF, and supporting the 5 km corridor designed between the Baltica 2 and Baltica 3 areas and BIII OWF, and additionally assume leaving an undeveloped area with a width of 4 km east of the area planned for development as part of the Baltic Power project.

As indicated in the submitted EIA Report, both the analyses performed for the purpose of preparing the EIA Report and the documentation submitted in the course of other procedures concerning the decision on environmental conditions for the OWFs planned on the north-eastern slope of the Słupsk Bank confirm that the boundaries of the water region intended for the implementation of the BIII OWF do not contain migration corridors for bats. As a result of the performed analyses, it was concluded that further investigation of the impact of the planned BIII OWF on the migration of bats is pointless, it will not lead to the acquisition of new knowledge, nor will it contribute to the determination of other conditions for the implementation, operation and decommissioning of the BIII OWF. In view of the above, it is not justified or even possible to determine the safety zones around the wind turbines and their significance for the migration of bats. In relation to bird migration, however, there are no examples of implementation of the OWF from other countries, and none of the environmental impact assessment reports prepared for the OWF in the Polish maritime areas confirmed the significance and possibility of determining zones around the individual wind turbines due to the perception of the entire farm as a barrier on the route.

For the purpose of preparing the EIA Report, taking into account the specific Project parameters, the modeling of the noise impact related to the foundation piling was repeated. The performed modeling was used to verify the effectiveness of the proposed solutions minimizing the noise impact. As indicated in the submitted EIA Report, they confirm the effectiveness and sufficiency of the proposed methods. At the same time, it is proposed to differentiate the parameter determining the effectiveness of technical solutions to minimize the impact of underwater noise depending on the species requiring the implementation of the said solutions, i.e. to indicate separately the limit values necessary to be met at the boundary of the nearest Natura 2000 site protecting marine mammals for porpoises and separately for seals, using customized weighing functions.

Among the changes applied for by the Investor, there was also a change consisting in adding a condition related to the need to perform visual observations of the presence of marine mammals during the removal of unexploded ordnance from the seabed and related to the

necessity to use scaring devices prior to the start of the seabed cleaning operations. In the opinion of the local authority, due to the difficulty of observation of marine mammals in the environment, and porpoises in particular, it should be assumed that individuals of these species may be present in the area exposed to the effects of detonation and, therefore, it is necessary to use a system for scaring marine mammals, ensuring the movement of animals to a distance safe for individual species, where no permanent hearing threshold shift will occur.

As indicated in the EIA Report, for the parameters of this project after the proposed modifications, only monopile and jacket foundations may be used for the installation of wind turbines. Due to the seabed varying depths in the water region intended for the implementation of the BIII OWF and the diversified geological conditions of the seabed, it is necessary to allow the use of both monopile and jacket foundations. At the same time, it should be emphasized that the conducted environmental impact assessment took into account the impact of the technology with more far-reaching effects, i.e. monopile foundations. It should be emphasized that leaving it possible to use one of four types of foundations in relation to the substation foundation, i.e. apart from monopile and jacket foundations, also gravity-base foundations and tripod foundations, in combination with the reduction in the number of substations from 6 pieces to one, is irrelevant from the point of view of the results of the environmental impact assessment of the entire BIII OWF. The assessment of the foundation process for selected foundations carried out in this report implements one of the guidelines for conducting the reassessment from among those indicated in the Environmental Decision.

In view of the above, in the opinion of the local authority, the updated conditions of implementation and operation of the Project together with the environmental impact assessment of the proposed changes in the conditions of the Environmental Decision and the new knowledge gathered in the scope of the environmental condition in the Polish maritime areas and the impact caused by the OWF as well as the consequences of the decisions made under other procedures on the decision on environmental conditions for OWF projects cause that the preconditions were eliminated.



REGIONAL DIRECTOR FOR
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Appendix No. 1 to decision ref. No.:

RDOŚ-Gd-WOO.420.41.2022.AM.6

pursuant to Article 84 section 2 of the Act of October 3, 2008 on access to information on the environment and its protection, public participation in environmental protection and on environmental impact assessments (consolidated text, Journal of Laws of 2022, item 1029, as amended)

CHARACTERISTICS OF THE PROJECT

The subject of the project is the construction of the **Bałtyk Środkowy III OWF** ("BIII OWF") with a power output ranging from 720 MW to 1200 MW. The project will be located in the southern part of the Baltic Sea, in the Polish Exclusive Economic Zone, approx. 23 km north of the coastline, at the level of the municipality of Łeba (Pomeranian Voivodship). The total area of the **BIII OWF** is approx. 117 km². The geographic coordinates of the project are presented in the table below:

Table 1. Geographic coordinates of the boundaries of the BIII OWF area.

Point	WGS 84 DD MM'SS.sss"	
	Latitude	Longitude
A	54°56'42,424" N	17°16'57,430" E
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C	55°02'52,125" N	17°14'45,028" E
D	54°59'55,268" N	17°31'37,853" E
E	54°57'24,641" N	17°24'47,597" E
F	54°57'09,443" N	17°22'42,654" E
G	54°57'05,517" N	17°21'25,617" E

The **BIII OWF** will consist of:

- up to **60** wind turbines ("WT"), the basic components of which are: foundation, tower, nacelle with a power generator, and rotor,
- **1 internal offshore** substation ("OS"),
- a maximum of 200 km of submarine power and telecommunication cables, connecting the WTs with each other and groups of wind turbines with the internal offshore substation.

The Investor holds a permit for erection and use of artificial islands, structures and devices in the Polish maritime areas (PSZW) for the project in question – decision of the Minister of Transport, Construction and Maritime Economy No. MFW/2/2012 of March 30, 2012.

The permit, however, includes a condition stating that the elements of the OWF cannot be located in the buffer of 500 m from the internal boundary of the area intended for the farm

construction. All structural components of the farm have to be located within the boundaries of the specified area, so it determines the maximum external range of the rotor, which additionally limits the area where foundations can be laid. The size of this limitation depends on the rotor radius. Moreover, as a result of the analysis of potential environmental impacts of the project, additional restrictions were made in the use of the OWF development area due to the possibility of creating a negative impact of the project on seabirds; during the design works, a decision was made to leave the area located in the west-northern corner of the farm undeveloped with wind turbines, in such a way as to create a passable 5 km wide corridor undeveloped with wind turbines, crossing the areas of the Bałtyk Środkowy III OWF, Baltica 2 OWF and Baltica 3 OWF in the SW-NE direction. Taking the above into account, the total surface area of the farm is approx. 117 km², including:

- the surface area for development, in accordance with the conditions specified in the permit for erection and use of artificial islands, structures and devices in the Polish maritime areas issued for the project, is approx. 94 km²;
- the surface area for development, taking into account the exclusion of a part of the BIII OWF area, for the purpose of creating a passable migration corridor for birds between groups of wind turbines, belonging to the projects located on the northern and north-eastern slope of the Słupsk Bank, is approx. 88 km².

The **BIII OWF** does not include the infrastructure for transmitting electricity generated by the farm to the shore. A separate project, the Offshore Transmission Infrastructure ("OTI"), will serve this purpose. For the project, decision ref. No.: RDOŚ-Gd-WOO.4211.12.2016.KSZ/AJ.29 of March 12, 2019 on environmental conditions for implementation of the project consisting in the construction of the offshore transmission infrastructure was issued by the Regional Director for Environmental Protection in Gdańsk. The WT parameters will depend on the selected capacity (the higher the power output, the higher the tower and the longer the turbine blade span is required). The basic boundary parameters of the wind turbines planned for installation at the **BIII OWF** are presented in the table below.

Table 2. Basic boundary technical parameters of wind turbines according to the option selected for implementation

Parameter	Option selected for implementation
Maximum total height of the wind turbine a.s.l. [m]	310
Minimum clearance between the lower blade position and the sea surface [m]	20
Maximum rotor diameter [m]	250
Maximum number of wind turbines [pcs]	60
Maximum zone for a single rotor [m ²]	49,088
Maximum total zone for the rotors [m ²]	2,945,244
Maximum number of accompanying infrastructure foundations [pcs]	1
Types of wind turbine foundations considered	Foundations: monopile and jacket (truss) foundations
Maximum seabed area occupied by 1 foundation of a wind turbine [m ²]	79
Types of accompanying infrastructure foundations considered	Foundations: monopile, tripod, jacket (truss) foundations and gravity-base foundations
Maximum seabed area occupied by 1 foundation of accompanying infrastructure [m ²]	1,964

Parameter	Option selected for implementation
Minimum distance between wind turbines (counting from the axis of individual structures) [m]	800
Maximum seabed area occupied by all foundations [m ²]	6,676
Maximum cable length of the farm internal connection infrastructure [km]	200

A wind turbine is mounted on a tower, consisting of steel pipes with an average diameter of approx. 10 m (depending on the model). The basic structural materials of turbine blades include epoxy and polyester resins, carbon fiber, glass fiber and laminates. The wind turbine towers will be mounted on foundations which, in turn, will be placed on the seabed. Currently, 4 types of foundations for the elements of the farm can be used, whereas in the case of wind turbines, only monopile or jacket (truss) foundations can be used, and in the case of the substation, apart from the two mentioned types, it is also possible to use tripod foundations and gravity-base foundations (*gravity based structures – GBS*).

The monopiles are made of steel cylinders with a diameter of 5–10 m that will be driven into the seabed. They are up to 120 m long. They are currently the most popular type of foundations used in the OWF. In the case of the BIII OWF, the maximum diameter of a pile in case of placing the wind turbine on monopile foundations will be 10 m.

A jacket foundation is made of four steel legs connected and reinforced with brackets made of cross-mounted pipes. That is why it is also called a truss foundation. These foundations are fixed to the seabed using 4 piles with a diameter of 1.8–3 m and a length of up to 70 m.

The tripod structure consists of one main section (1st stage), which is the base for the fastener and the tower, and three 2nd stage sections, which are the foundation legs. The tripod legs are equipped with sleeves for pile fixing. These foundations are fixed to the seabed using 3 piles with a diameter of up to 2.5 m and a length of up to 60 m.

The gravity-base foundation is a reinforced concrete structure. Its concept is based on the use of large mass to support the structure of an offshore substation. Gravity-base foundation consists of a main body and a base. The base can be conical or flat (in the shape of an octagon, hexagon, circle, etc.) and have a diameter of up to 50 m. The gravity-base foundation is filled with ballast.

Wind turbines will be connected by means of a grid of 33 kV or 66 kV power cables to the substation. It is planned to lay up to 200 km of cables inside the farm. The cables will be buried in the seabed up to a depth of 3 m. If the technical conditions do not allow for their burying, they will be **provided with permanent protections, in accordance with § 54 section 7 point 4 letter b of the Regulation of the Council of Ministers of April 14, 2021 on the adoption of a spatial development plan for internal sea waters, the territorial sea and the exclusive economic zone at a scale of 1:200,000 (Journal of Laws, item 935) (Appendix No. 2 to the Regulation – Detailed Decisions).**

Electricity generated by the wind turbines belonging to the **BIII OWF** will be prepared at the farm for further transmission. For this purpose, **1 internal offshore substation (OS)** will be built within the boundaries of the farm. The construction of the substation will allow for the reduction of the number of export cables carrying electricity from the wind farm to the shore, and will significantly reduce transmission losses.

As part of the BIII OWF, a substation will be constructed, being either a transformer

substation – collecting alternating current (AC) from wind turbines, and then changing its voltage (33 or 66 kV) to a correspondingly higher level, enabling its further transmission in the alternating current technology; or a substation combining the transformer function with the converter function (AC/DC) – converting alternating current (AC) into direct current (DC), enabling its further transmission in the direct current technology.

At the present stage of the project, no decision has yet been taken on whether to transmit electricity to the shore in the direct current or alternating current technology.

Infrastructure for the transmission of electricity to the shore (i.e. offshore and onshore export cables, onshore substation and possible additional OSs) will form a separate, independent project to construct the offshore transmission infrastructure (“OTI”), subject to a separate environmental impact assessment procedure.

AC offshore transformer station will be built on a platform based on monopile, jacket, tripod or gravity-base foundations. The necessary power and staff welfare infrastructure will be installed on the working platform.

Typical OS AC equipment consists of the following components: an indoor switchgear, power transformers, MV and HV switchgears, reactive power compensation reactors and capacitors, transformers or power generators to provide backup power supply, earthing system, control panel of internal systems, low-voltage distribution devices for auxiliary equipment and protection, control and instrumentation systems, UPS uninterruptible power supply unit, SCADA equipment, service staff accommodation, rest and welfare rooms, material storage, workshop, boat landing, helicopter landing area, OH&S and emergency equipment including Diesel generators, emergency lighting, lifeboats.

Offshore AC/DC converter station will be built as an additional station, in addition to the transformer stations described above, if the Investor decides to use DC transmission technology. It may be constructed as a separate facility or as an additional element of the AC substation, which will take place if such a transmission technology is selected.

Electricity from the AC transformer substations will be transmitted to the AC/DC converter substation. The task of the substation will be to convert alternating current (AC) into direct current (DC) and possibly to increase voltage in order to prepare it for further transmission to the shore. The AC/DC converter station will be constructed on the basis of a platform embedded on a monopile, jacket, tripod or gravity-base foundation. The necessary power infrastructure will be installed on the working platform, in particular equipment for converting alternating current into direct current.

imposing the obligation to carry out the environmental impact reassessment in the course of the building permit procedure for the BIII OWF project. Therefore, with the content of this decision, the local authority accepted the Investor’s request to waive the obligation to perform a reassessment of the environmental impact of the project.

As indicated in the submitted EIA Report, the update of the Project parameters does not result in an increase in the significance of any of the identified impacts relating to the implementation, operation or decommissioning of the BIII OWF; on the contrary, in the case of a significant part of the impacts, their significance is reduced and in part reduced significantly. Similar situations are presented for the assessment of cumulative impacts, as the update of the Project causes either no change in relation to the impacts identified for the Project with the parameters approved in the Environmental Decision or their reduction, thus the base for cumulation with other impacts is reduced or remains unchanged. As a consequence, also the impact in the form of cumulative impacts of the Project, in the proposed modified parameters,

is reduced. There are also no new circumstances, changes in the factual situation, that would result in the occurrence of new impact receptors or scientific knowledge that would indicate a greater sensitivity of the identified receptors to impacts, the source of which may be the implementation, operation or decommissioning of the BIII OWF. Thus, according to the local authority the project in question with updated parameters does not result in the obligation to conduct the environmental impact assessment of the proposed change in the conditions of the Environmental Decision in a cross-border context.

In conclusion, the Regional Director for Environmental Protection in Gdańsk, in accordance with the Investor's application, made changes to the Environmental Decision as per point I hereof. The applied changes lead either to the limitation of the maximum scope of the conditions specified in the Environmental Decision or to the limitation of the scope of methods of the project implementation or technical solutions. The local authority agreed to all changes proposed by the Investor, except for one concerning the resignation from shutdown of turbines located on the route of registered bird flocks during migration periods, imposed in point II.2.a of the Environmental Decision.

The Regional Director for Environmental Protection would like to emphasize that by imposing the condition of a temporary shutdown of turbines in the period of bird migrations, the local authority considered minimizing the collision with the project in question.

As indicated in the EIA Report, as a result of the surveys of birds flying over the BIII OWF area, a high diversity in bird species was recorded. 97 species (32 waterbird and 65 terrestrial bird species) determined during spring and 56 species (25 waterbird and 31 terrestrial bird species) were identified during autumn migration. The species composition included almost all seabird species found in the Baltic Sea region and all major terrestrial bird taxonomic groups. High level of diversity of species recorded is not surprising, as of the 300 species inhabiting the region, the majority are migratory bird species. Taking into account the number of recorded bird species, their conservation status and sensitivity to offshore wind farms, several species of migrating birds were identified as the most important species to be included in the EIA of the BŠIII wind farm, and these are: long-tailed duck, velvet scoter, common scoter, goose species, swan species, common crane, little gull, European golden plover and razorbill, the local authority did not accept the application for the change of the content of the monitoring in question.

Taking into account the changes in the parameters of the project in question, the local authority considered it justified to update the Project characteristics constituting Appendix No. 1 to the Environmental Decision, ref. No.: RDOŚ-Gd-WOO.4211.12.2015.KP.22 of July 7, 2016. The updated Characteristics of the project in question constitutes Appendix No. 1 to the decision.

In view of the above, the Regional Director for Environmental Protection in Gdańsk, by virtue of the letter ref. No.: RDOŚ-Gd-WOO.420.41.2022.AM.5 of September 15, 2022, acting pursuant to Article 10 of the Code of Administrative Procedure, informed the parties to the procedure about the completion of the collection of evidence in the case and about the possibility of reading and commenting on the collected evidence and materials, indicating that the decision terminating the procedure in question will be issued not earlier than 7 days from the date of delivery.

No comments or requests have been submitted within the set time frame.

Therefore, it shall be decided as stated in the introduction herein.

The decision is subject to announcement on publicly accessible data list.

For the issuance of this decision a stamp duty in the amount of PLN 205 was paid (Appendix No. 1, part I, item 45 of the *Act of November 16, 2006 on stamp duty – Journal of Laws of 2021, item 1923, as amended*).

INSTRUCTION

Pursuant to Article 127 § 2 and 129 § 1 of the *Code of Administrative Procedure*, in conjunction with Article 127 section 3 of the *EIA Act* and Article 76 section 3 of the *POWF Act*, this decision may be appealed against by a party to the General Director for Environmental Protection through the intermediary of the Regional Director for Environmental Protection in Gdańsk, ul. Chmielna 54/57, 80-748 Gdańsk, within 14 days from the date of delivery of the decision to the party or within 30 days from the date of announcement or delivery of the notification of the decision made.

Pursuant to Article 76 section 4 of the *POWF Act*, the appeal against the administrative decision shall contain objection to the decision, shall specify the essence and scope of the request being the subject of the appeal and shall indicate the evidence justifying the request.

Regional Director for
Environmental Protection
in Gdańsk

Radosław Iwiński

To be received by:

1. Management Board of MFW Bałtyk III Sp. z o.o., MFW Bałtyk II Sp. z o.o., ul. Krucza 24/26, 00-526 Warsaw
2. to file

For the attention of:

1. Director of the Maritime Office in Gdynia, ul. Chrzanowskiego 10, 81-338 Gdynia
2. State Border Sanitary Inspector in Gdynia, ul. Kontenerowa 69, 81-155 Gdynia



REGIONAL DIRECTOR FOR
ENVIRONMENTAL
PROTECTION IN GDAŃSK

Appendix No. 1 to decision ref. No.:
RDOŚ-Gd-WOO.420.41.2022.AM.6

pursuant to Article 84 section 2 of the Act of October 3, 2008 on access to information on the environment and its protection, public participation in environmental protection and on environmental impact assessments (consolidated text, Journal of Laws of 2022, item 1029, as amended)

CHARACTERISTICS OF THE PROJECT

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The permit, however, includes a condition stating that the elements of the OWF cannot be located in the buffer of 500 m from the internal boundary of the area intended for the farm construction. All structural components of the farm have to be located within the boundaries of

the specified area, so it determines the maximum external range of the rotor, which additionally limits the area where foundations can be laid. The size of this limitation depends on the rotor radius. Moreover, as a result of the analysis of potential environmental impacts of the project, additional restrictions were made in the use of the OWF development area due to the possibility of creating a negative impact of the project on seabirds; during the design works, a decision was made to leave the area located in the west-northern corner of the farm undeveloped with wind turbines, in such a way as to create a passable 5 km wide corridor undeveloped with wind turbines, crossing the areas of the Bałtyk Środkowy III OWF, Baltica 2 OWF and Baltica 3 OWF in the SW-NE direction. Taking the above into account, the total surface area of the farm is approx. 117 km², including:

- the surface area for development, in accordance with the conditions specified in the permit for erection and use of artificial islands, structures and devices in the Polish maritime areas issued for the project, is approx. 94 km²;
- the surface area for development, taking into account the exclusion of a part of the BIII OWF area, for the purpose of creating a passable migration corridor for birds between groups of wind turbines, belonging to the projects located on the northern and north-eastern slope of the Słupsk Bank, is approx. 88 km².

The **BIII OWF** does not include the infrastructure for transmitting electricity generated by the farm to the shore. A separate project, the Offshore Transmission Infrastructure ("OTI"), will serve this purpose. For the project, decision ref. No.: RDOŚ-Gd-WOO.4211.12.2016.KSZ/AJ.29 of March 12, 2019 on environmental conditions for implementation of the project consisting in the construction of the offshore transmission infrastructure was issued by the Regional Director for Environmental Protection in Gdańsk. The WT parameters will depend on the selected capacity (the higher the power output, the higher the tower and the longer the turbine blade span is required). The basic boundary parameters of the wind turbines planned for installation at the **BIII OWF** are presented in the table below.

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Maximum number of wind turbines [pcs]	60
Maximum zone for a single rotor [m ²]	49,088
Maximum total zone for the rotors [m ²]	2,945,244
Maximum number of accompanying infrastructure foundations [pcs]	1
Types of wind turbine foundations considered	Foundations: monopile and jacket (truss) foundations
Maximum seabed area occupied by 1 foundation of a wind turbine [m ²]	79
Types of accompanying infrastructure foundations considered	Foundations: monopile, tripod, jacket (truss) foundations and gravity-base foundations
Maximum seabed area occupied by 1 foundation of accompanying infrastructure [m ²]	1,964
Minimum distance between wind turbines (counting from the axis of individual structures)	800

Parameter	Option selected for implementation
[m]	
Maximum seabed area occupied by all foundations [m ²]	6,676
Maximum cable length of the farm internal connection infrastructure [km]	200

A wind turbine is mounted on a tower, consisting of steel pipes with an average diameter of approx. 10 m (depending on the model). The basic structural materials of turbine blades include epoxy and polyester resins, carbon fiber, glass fiber and laminates. The wind turbine towers will be mounted on foundations which, in turn, will be placed on the seabed. Currently, 4 types of foundations for the elements of the farm can be used, whereas in the case of wind turbines, only monopile or jacket (truss) foundations can be used, and in the case of the substation, apart from the two mentioned types, it is also possible to use tripod foundations and gravity-base foundations (*gravity based structures – GBS*).

The monopiles are made of steel cylinders with a diameter of 5–10 m that will be driven into the seabed. They are up to 120 m long. They are currently the most popular type of foundations used in the OWF. In the case of the BIII OWF, the maximum diameter of a pile in case of placing the wind turbine on monopile foundations will be 10 m.

A jacket foundation is made of four steel legs connected and reinforced with brackets made of cross-mounted pipes. That is why it is also called a truss foundation. These foundations are fixed to the seabed using 4 piles with a diameter of 1.8–3 m and a length of up to 70 m.

The tripod structure consists of one main section (1st stage), which is the base for the fastener and the tower, and three 2nd stage sections, which are the foundation legs. The tripod legs are equipped with sleeves for pile fixing. These foundations are fixed to the seabed using 3 piles with a diameter of up to 2.5 m and a length of up to 60 m.

The gravity-base foundation is a reinforced concrete structure. Its concept is based on the use of large mass to support the structure of an offshore substation. Gravity-base foundation consists of a main body and a base. The base can be conical or flat (in the shape of an octagon, hexagon, circle, etc.) and have a diameter of up to 50 m. The gravity-base foundation is filled with ballast.

Wind turbines will be connected by means of a grid of 33 kV or 66 kV power cables to the substation. It is planned to lay up to 200 km of cables inside the farm. The cables will be buried in the seabed up to a depth of 3 m. If the technical conditions do not allow for their burying, they will be **provided with permanent protections, in accordance with § 54 section 7 point 4 letter b of the Regulation of the Council of Ministers of April 14, 2021 on the adoption of a spatial development plan for internal sea waters, the territorial sea and the exclusive economic zone at a scale of 1:200,000 (Journal of Laws, item 935) (Appendix No. 2 to the Regulation – Detailed Decisions).**

Electricity generated by the wind turbines belonging to the **BIII OWF** will be prepared at the farm for further transmission. For this purpose, **1 internal offshore substation (OS)** will be built within the boundaries of the farm. The construction of the substation will allow for the reduction of the number of export cables carrying electricity from the wind farm to the shore, and will significantly reduce transmission losses.

As part of the BIII OWF, a substation will be constructed, being either a transformer substation – collecting alternating current (AC) from wind turbines, and then changing its voltage (33 or 66 kV) to a correspondingly higher level, enabling its further transmission in the

alternating current technology; or a substation combining the transformer function with the converter function (AC/DC) – converting alternating current (AC) into direct current (DC), enabling its further transmission in the direct current technology.

At the present stage of the project, no decision has yet been taken on whether to transmit electricity to the shore in the direct current or alternating current technology.

Infrastructure for the transmission of electricity to the shore (i.e. offshore and onshore export cables, onshore substation and possible additional OSs) will form a separate, independent project to construct the offshore transmission infrastructure (“OTI”), subject to a separate environmental impact assessment procedure.

AC offshore transformer station will be built on a platform based on monopile, jacket, tripod or gravity-base foundations. The necessary power and staff welfare infrastructure will be installed on the working platform.

Typical OS AC equipment consists of the following components: an indoor switchgear, power transformers, MV and HV switchgears, reactive power compensation reactors and capacitors, transformers or power generators to provide backup power supply, earthing system, control panel of internal systems, low-voltage distribution devices for auxiliary equipment and protection, control and instrumentation systems, UPS uninterruptible power supply unit, SCADA equipment, service staff accommodation, rest and welfare rooms, material storage, workshop, boat landing, helicopter landing area, OH&S and emergency equipment including Diesel generators, emergency lighting, lifeboats.

Offshore AC/DC converter station will be built as an additional station, in addition to the transformer stations described above, if the Investor decides to use DC transmission technology. It may be constructed as a separate facility or as an additional element of the AC substation, which will take place if such a transmission technology is selected.

Electricity from the AC transformer substations will be transmitted to the AC/DC converter substation. The task of the substation will be to convert alternating current (AC) into direct current (DC) and possibly to increase voltage in order to prepare it for further transmission to the shore. The AC/DC converter station will be constructed on the basis of a platform embedded on a monopile, jacket, tripod or gravity-base foundation. The necessary power infrastructure will be installed on the working platform, in particular equipment for converting alternating current into direct current.

The main components of the converter station include: converter transformers, converter thyristors, harmonic filters, capacitor batteries, reactive power compensation reactors, external pumping station (cooling system).

The implementation of the Project may be carried out in stages, of which the first stage will cover the capacity in the range of 600–720 MW. The first stage is planned for implementation in the years 2024–2027. Implementation of subsequent stages will depend on the investment decisions made based on the current market conditions. The total construction time for the first stage will be up to 3.5 years. The time of construction of subsequent stages will depend on the decision regarding their size (number of wind turbines) and available technologies and equipment for the construction of offshore wind farms.

As the offshore wind energy industry is developing very dynamically, and new models of wind turbines and other equipment appear every year, so the project may use models of turbines that are not currently available on the market. For the above reasons, the

environmental impact assessment was carried out on the basis of the envelope of technical parameters, which defined the worst case scenarios of environmental impacts of particular technological solutions. Also, the final technical parameters of every individual piece of farm equipment cannot be specified at this stage of issuing the decision on environmental conditions, but only upon issuing the building permit. However, the authority responsible for issuing the building permit shall be bound by the provisions of this decision on environmental conditions.

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