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For the Public Institution Coastal Research and Planning Institute E-mail: info@corpi.lt Your ref. 2023-10-02 No. S23-215

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To the addressees on the list

DECISION ON THE ENVIRONMENTAL IMPACT OF THE INSTALLATION AND OPERATION OF A WIND FARM IN THE PAŠVITINIS AND

ŽEIMELIS WARDS OF THE MUNICIPALITY OF PAKRUOJIS

2023- No. (30-2)-A4E-

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3. Title of the proposed economic activity and legal basis for the environmental impact assessment

The proposed economic activity (hereinafter referred to as the PEA) is the installation of a wind farm in the Pašvitinis and Žeimelis wards, municipality of Pakruojis district.

The environmental impact assessment of the PEA is carried out in accordance with Article 3(1)(1) of the Law on Environmental Impact Assessment of Proposed Economic Activities (version in force from 01/01/2023 until 22/06/2023) (hereinafter referred to as the EIA Law), ie the PEA complies with the activity indicated in Annex 1, point 3.10 of

3.10.2: onshore wind turbine construction where 7 or more wind turbines are proposed and the distance between the proposed wind turbines and the wind turbines that are already built, under construction or proposed to be built is 5 km or less (measured between the centres of the masts) or where these figures and distances are achievable, including the wind turbines that have already been built, are being built or are proposed to be built.

4. Location of the proposed economic activity

The wind farm is proposed to be constructed and operated on the agricultural land plots between Bubštai village, Janelioniai village, Petroniškiai village, Mačiūnai village, Šiaudiniai 1 village, Šiaudiniai village, Sodeliškės village, Peluodžiai village of the Pašvitinis ward, and Aukštadvaris village, Liesai village, Grikpėdžiai village, Striukai village, Moniūnai village, Moniūnėliai village, Pikčiūnai village, Steigviliai village, Diržiai village, Višeikiai village, Daugalioniai village, Laumekiai village, Jovaišiai village, Gelčiai village, Kairelių village, Margiai village of the Žeimelis ward. The options for the location of the transformer substation to connect the wind farm to the electricity transmission network are researched in the territories of Pakruojis district municipality, Žeimelis ward and Joniškis district municipality, Kepaliai and Gataučiai wards.

According to the solutions of the amendment to the general plan of the territory of the municipality of Pakruojis district, approved by the decision of 27 September 2018 of the Municipal Council of Pakruojis district No. T-229 "On the amendment of the decision of 25 September 2008 No. T-291 "On the approval of the general plan of the territory of the municipality of Pakruojis district", the territory of the PEA is located in the zone of intensive use of land for agriculture, with interfering areas of farm forests.

5. Description of the proposed economic activity

During the proposed economic activity, up to 65 units of wind turbines are proposed to be built and used. The total capacity of the proposed wind farm is expected to be up to 350 MW. The physical-technical parameters of the wind turbines assessed in the Environmental Impact Assessment Report (the Report) are as follows: nominal capacity of one wind turbine up to 8 MW, tower height of 148–180 m, rotor diameter of up to 200 m, overall height of the wind turbine up to 280 m, maximum noise level of 107.2 dBA.

The main works proposed for the wind farm are: installation of a construction and maintenance site for the wind turbines (approximately 0.3–0.5 hectares are necessary per wind turbine); installation of the foundations for the wind turbines (monolithic foundations, cast in-situ from ready-mixed concrete); installation of wind turbines (factory-made wind turbine elements are brought to the site; wind turbine tower, rotor and blades are mounted on the installed foundations); installation of cable lines within the wind farm; clearance of the construction work area. Upon the implementation of the PEA, the land plots will have wind turbines equipped with the necessary maintenance infrastructure: access roads, maintenance sites, underground electricity cable lines and a transformer substation.

The electricity generated by the proposed wind turbines will be connected via underground cables to the newly designed 30/110 kV or 30/330 kV transformer substation of the wind farm.

Existing roads will be used to the maximum extent possible, and access roads to the proposed wind turbine installation sites will be built from these roads. Existing roads will be reinforced as needed, ie unpaved dirt roads will be graded, existing ditches will be levelled, and roads will be periodically maintained. Where there are no roads to access the wind farms, the necessary road sections will be designed and constructed. The proposed access roads from existing roads to the wind turbine installation sites shall be proposed, where possible, along the boundaries of the land to be crossed, in order to minimise disruption to agricultural activities.

The Environmental Impact Assessment (EIA) analysed the following options:

- the "zero" option. This option reflects the current state of the environment, the conditions and the natural changes that would occur in the environment in the event of non-activity.

- activity development option. Installation and operation of a wind farm in the researched area. The report analyses 65 sites suitable for wind farm installation, from which two possible development alternatives are drawn:

- Development Option I: The possible installation of a wind farm consisting of 44 wind turbines is researched (hereinafter referred to as Option I). Installation of wind turbinesVE1R-11, VE2, VE2-2, VE3, VE3- 1, VE3-2, VE3-3, VE3-4, VE3-5, VE3-6, VE3-7, VE4, VE4-1, VE4-2, VE4-3, VE4-4, VE5, VE13 – ED, VE5-1, VE5-2, VE7, VE8, VE9, VE12, VE12-1, VE12-2, VE13, VE13-1, VE13-2, VE13- 3, VE14-1, VE14-2, VE14-3, VE17-1, VE18-1, VE19-1, VE20-1, VE20-3, VE23, VE23-1, VE25-1

1, VE30-1, VE31-1, VE32-1;

- Development Option II: The possible installation of a wind farm consisting of 65 wind turbines is researched (hereinafter referred to as Option II). Installation of wind turbinesVE1R-11, VE2, VE2-2, VE3, VE3-1, VE3-2, VE3-3, VE3-4, VE3-5, VE3-6, VE3-7, VE4, VE4-1, VE4-2, VE4-3, VE4-4, VE5, VE13 – ED, VE5-1, VE5-2, VE7, VE8, VE9, VE12, VE12-1, VE12-2, VE13, VE13-1, VE13-2, VE13-3, VE14-1, VE14-2, VE14-3, VE15-1, VE17-1,

VE18-1, VE19-1, VE20-1, VE20-2, VE20-3, VE23, VE23-1, VE25-1, VE29-1, VE30-1, VE31-1, VE32-1, VE40-3, VE40-5, VE41-5, VE41-8, VE41-9, VE42-1, VE42-4, VE42-7, VE42-9, VE43-1, VE43-2, VE43-3, VE43-4, VE43-5, VE43-6, VE43-7, VE43-8, VE43-9.

The PEA report analyses 44 possible wind turbine installation sites (for Option I) and 65 possible wind turbine installation sites (for Option II) for the installation of the wind farm. However, depending on the capacity of the chosen wind turbine model, the number of wind turbines to be installed will be such that the total installed capacity of the wind farm would not exceed 350 MW (due to the capacity of the transmission grid), ie the final number of wind turbines in the wind farm will be up to 44 wind turbines.

A wind farm consisting of four wind turbines is proposed in the territory of the Pakruojis district municipality within a radius of 5 km from the location of the PEA. The proposed wind farm is located ~ 0.68 km away from the nearest wind turbines proposed for the EIA.

Information on products, energy, raw materials and chemicals

The construction of the wind turbines will use certified products that meet European Union requirements, and only the installation of the individual pieces of equipment will be carried out on the land plots.

Special concrete will be used for the foundations and steel rods will be used during construction. Machinery (vehicles, machinery) used during the wind turbine, cable, and road construction works will use diesel fuel. Gravel and crushed stone will be used for the installation of the wind farm maintenance sites and access roads. Measures to reduce road dust (watering) will be used where necessary.

The use or storage of hazardous chemicals or mixtures; radioactive substances; hazardous or non-hazardous waste is not expected in the course of the PEA.

Information on waste generation and management

Construction of wind turbines and maintenance sites and the installation of foundations can generate small amounts of construction waste. Temporary 10 m³ containers for the storage of construction waste are proposed to be built on the site. All construction waste generated during the works is sorted and stored in containers until it is removed and handed over to waste managers.

During operation, waste can only be generated during repairs and will be transferred to waste managers.

During decommissioning, dismantled technological equipment and individual equipment parts shall be taken to a storage, recycling or collection facility specified by the activity organiser or delivered to a waste collection company authorised to handle such waste. The wind towers, the generator and all metal parts are disposed of in a scrap yard. It is estimated that the total amount of metal waste could be as high as 13,200 tonnes (Option I) and 19,500 tonnes (Option II). Wings and fibreglass and other parts, which may be as high as 880 tonnes (for Option I) and 1,300 tonnes (for Option II), shall be delivered to a waste collection company authorised to handle such waste. The foundations would be dismantled, and the metal and concrete segments separated and delivered to a waste collection company authorised to handle such waste. The used lubricant/petroleum products are extracted and placed in sealed containers, which are taken to hazardous waste collection companies for disposal according to the contract with a company authorised to handle such waste.

Information on the impact of the PEA on land (surface and subsurface), soil, water

The PEA does not lead to the use of water or the generation of wastewater. Surface (rain and water from melting snow) runoff from the wind turbine maintenance sites will not be contaminated and is intended to be channelled to the adjacent grasslands for natural infiltration into the ground.

The locations of the wind turbines have been chosen so as not to encroach on the coastal protection zones of surface water bodies. Installation sites of wind turbines VE3-4, VE4-3, VE4-4, VE9, VE1 2-2 (for Option I) and VE42-1, VE40-3 (for Option II) are proposed to be the closest to surface water bodies. Distances of 29–60 m (Option 1) and 32–40 m (Option 2) are to be maintained between these wind turbines and the coastal protection zones of surface water bodies. When wind turbines are installed, wind turbine construction sites will be designed so that the construction work area and the boundaries of the construction sites do not enter the coastal

protection zone. For the construction of new roads or bridges over surface water bodies over streams, culverts will be installed to ensure that water flows without creating additional obstructions that could alter stream flows. No changes to the hydrological regime are foreseen as a result of the PEA, and no changes to the shores of streams or shorelines are expected.

The proposed wind turbines do not fall within groundwater sources or their protection zones, low, medium or high probability zones of water from melting snow and flooding caused by heavy rainfall.

There are no active geological processes and phenomena identified in the area of the proposed wind farm and its surroundings. Karstic areas are 12.3 km from the nearest proposed wind turbines. There are no protected geological objects, geotopes or geological monuments within the boundaries of the proposed land plots for wind turbines and adjacent land plots. The nearest protected geological object is 0.63 km from the nearest proposed wind turbine.

There are no exploited or explored mineral deposits in the area of the PEA. The nearest sand deposit (Gegiedždvario (No 5143)) explored in detail is 1.5 km from the nearest wind turbine. The area of the PEA includes the prospective resources of the Žeimelis dolomite deposit (No 3900), which includes the proposed wind farm VE14-1, and the Grikpėdžiai dolomite deposit (No 3901), which includes the wind farms VE30-1, VE13, VE13-1. The Žeimelis and Grikpėdžiai dolomite deposits, within the boundaries of which the 4 proposed wind turbines are located, are not exploited and their resources are prospective. The prospective mineral deposits do not fall under the category of explored resources and therefore no land use restrictions apply within their range, and no negative impact on mineral resources is expected.

Information on the impact of the PEA on landscape and biodiversity

Landscape. The planned wind farm does not fall within the 27 areas and sites having particularly protected visual aesthetic potential of the country, as identified in the National Landscape Management Plan (hereinafter referred to as the Management Plan), approved by Order No. D1-703 of the Minister of the Environment of the Republic of Lithuania, dated 02/10/2015. The site falls within the visual landscape structure types indexed as V0H3-c and V0H2-d. The construction of the proposed wind farm with 180-metre-high mast wind turbines would result in a regulated significant landscape impact distance of 10 x 180 m, ie up to ~1.8 km. There are no areas of particularly protected landscape or particularly prominent landscape complexes or panoramic viewpoints within 1.8 km of the researched wind turbine installation sites. The proposed wind turbines are located at a distance of more than 8 km from the country's most valuable panoramic viewpoint No. 150 Tričiai Mound (viewpoint), located in Tričiai village, Linkuva ward, Pakruojis distr. municipality.

To assess whether the proposed wind turbines can be visually seen from important landscape viewpoints, an assessment of the vertical angle of view was carried out. It is estimated that the installation of wind turbines with a total height of 280 m would create an area at a distance of up to 5.6 km from the wind turbines where the vertical viewing angle could exceed the 2.80° degree limit. There are no significant landscape viewpoints at this distance.

The assessment of the potential impact of the PEA for the viewpoint of the Tričiai Mound (mound in Linkuva ward), which is included in the list of the country's most valuable panoramic views, has indicated that the PEA will result in up to a 1.78° vertical viewing angle in Option I and up to a 1.96° vertical viewing angle in Option II.

When assessing the combined visual outcome of the proposed wind farms and the wind farms that are being proposed during the PEA, the visual dominance values identified do not exceed a vertical angle of view of 2.8° from viewpoints in the areas of particularly protected landscapes. The total vertical angle of view at the Tričiai Mound was found to be 1.96°.

Some of the wind turbines considered in the PEA options are located in the natural frame areas of Pakruojis District Municipality. Due to the relatively large distances between the proposed wind turbine installation sites, the small land area of each wind turbine (0.3–0.5 hectares), and the existing agricultural land use, the construction of the wind farm will not alter the essential functions of the existing natural frame network.

Sites of Europe Ecological Network Natura 2000 are also protected. Wind turbine installation sites do not fall within the boundaries of protected areas and the areas of European

Ecological Network Natura 2000, either for Option I or Option II. The land plots researched in the PEA are located within 0.35 km of the nearest protected area (Laumekiai Botanical Reserve) and within 0.3 km of the nearest European Ecological Network Natura 2000 site (the Laumekiai Forest Site which is significant for the conservation of habitats).

Wind turbines are not proposed in natural habitats that are of importance to the European Community. The nearest natural habitat of importance for the European Community (6510 Lowland hay meadows) is located at a distance of approximately 0.11 km from the proposed wind turbine VE4-2.

<u>Biodiversity.</u> According to the database of the Protected Species Information System (SRIS), there are no identified habitats or sites of protected species on the land plots proposed for the wind turbine installation. From August 2022 to July 2023, bird and bat monitoring, identification of breeding and nesting sites, recording of bird and bat migration, and identification of potential risks were carried in order to identify the potential impact on birds and bats. Based on the site analysis and bird and bat observations, a cumulative assessment of all potential adverse effects was made. The most dangerous wind turbines are VE3-4, VE5-1. Most sensitive wind turbines: VE5-1, VE3-4, VE3-6, VE3-1, VE3-2, VE4-2, and VE12-2 for Option I; VE5-1, VE3-4, VE3-6, VE3-6, VE3-1, VE3-2, VE4-2, VE12-2, VE29-1, VE40-3, VE41-8, VE43-2 for Option II.

Wind turbines with medium risk: VE1R-11, VE4, VE13 – ED, VE9, VE23, VE23-1, VE3, VE4-3, VE4-4, VE7, VE18-1, VE25-1 for Option I; VE1R-11, VE4, VE13 – ED, VE9, VE23, VE23-1, VE43-6, VE3, VE4-3, VE4-4, VE7, VE18-1, VE25-1, VE41-9, VE42-4, VE43-1, VE43-5 for Option II. The other remaining proposed wind turbines are considered to be of low risk, and are not expected to have a significant negative impact on either bats or birds.

The assessment of the combined wind farms (both Option I and Option II) does not show any increased sensitivity due to the operation of both wind farms. A more significant impact is expected if Option II is developed, where more widely distributed wind turbines cover a larger

area and can have a significantly higher impact than the development of Option I with the proposed wind farm consisting of 4 wind turbines. <u>Vegetation</u>. The territory of the PEA is forested, with small farm forests (group IV) predominating, and ecosystem protection and conservation forests along the riverbanks. The minimum distance from the researched wind turbine installation sites to the forest is about 0.02–0.029 km. No deforestation will be carried out

for the installation of wind turbines, the laying of underground electricity cables or the construction of access roads. According to SRIS data, protected plants in the proposed wind farm were not found in the area.

Information on the impact of the PEA on material assets

The PEA does not require the deprivation of land or buildings, as the proposed wind turbines are to be built on agricultural land and no residential development is foreseen in the planning documents for these areas.

All proposed underground cable lines in the wind farm are proposed with a view to maximising the use of the routes and buffer strips of existing roads and proposed access roads to the wind turbines, and therefore, the regulations on the use of the protection zone for the underground cable lines will not lead to significant new restrictions on the activity. Written consents will be obtained from the owners of the land plots for the underground cable lines.

Information on the impact of the PEA on immovable cultural assets

The proposed wind turbines do not fall within the boundaries of registered sites of cultural assets or their protection zones. The nearest registered cultural heritage site (Aukštadvaris, Gudeliai cemetery (code 12417)) is 0.22 km away. The proposed wind turbine installation sites are located sufficiently far from the registered cultural heritage sites and are not within the physical and visual impact subareas of the designated conservation areas and will not adversely affect them.

Information on the impact of the PEA on public health

The calculated distance of 4 x mast height (ie the distance to the buildings and sites listed in Article 49(9) of the Renewable Energy Act) is 0.72 km. Within this distance, 3 dwellings, 1 plot of residential land without buildings, remains of 1 residential building have been identified for Option I of the PEA; 7 dwellings, 1 plot of residential land without buildings, remains of 1 residential building have been identified for Option II.

The nearest residential area is 0.362 km away. The nearest public facility (Pašvitinis Primary School in Pakruojis district) is more than 1.7 km away.

The PEA may result in temporary and localised increases in air and noise pollution due to the use of machinery and equipment (earthmoving, transport, construction, etc) on site. This increase in air and noise pollution will be short-term, episodic (only during the execution of the works) and will not have a significant impact on environmental quality. The works will be carried out during the day.

To reduce noise in the case of the two development options for the PEA, a limitation on the maximum sound power output of each wind farm is set - VE3 - 105 dBA; VE8, VE9, VE13-1 - 106 dBA; VE1R-11 - 106,2 dBA; VE13-3 - 106,3 dBA; VE32-1 - 106,5 dBA; VE17-1, VE20-3 - 106,7 dBA; VE30-1 - 106,8 dBA; VE2, VE3-3, VE4-3, VE13, VE14-1- 107 dBA; VE5-2 - 107,1 dBA.

Noise modelling was carried out with WindPRO software (version 3.5). The modelling results show that the predicted noise emissions due to the PEA in the residential area could be in the range of 19.7–43.6 dBA for Development Option I and 27.2–43.8 dBA for Development Option II.

The assessment of the interaction of the PEA with the wind turbines proposed in the vicinity and the cumulative noise calculations show that noise levels in the nearest residential areas may reach up to 43.6 dBA for Development Option I and up to 43.8 dBA for Development Option II.

WindPro (version 3.5) software was used to predict the shadow cast. According to the astronomical (worst-case scenario) shadow cast analysis, the duration of shadow flicker exceeds the threshold of 30 hours/year and 30 minutes/day in most of the nearest residential environments. Wind turbines that cause shadow cast duration excesses will be equipped with a shadow shut-down mechanism. According to the analysis, after assessing the shadow shut-down measures at these wind turbines: For Development Option I - VE1R-11, VE2, VE3, VE3-1, VE3-2, VE3-3, VE3-4, VE3-5, VE3-6, VE3-7, VE4, VE4-1, VE4-2, VE4-3, VE4-4, VE5, VE5-2, VE7, VE8, VE9, VE12, VE12-1, VE13-ED, VE13-1, VE13-2, VE13-3, VE14-1, VE14-2, VE14-3, VE18-1, VE19-1, VE20-3, VE23, VE23-1, VE25-1, VE30-1, VE31-1, VE32-1; For Development Option II - VE1R-11, VE2, VE3, VE3-1, VE3-2, VE3-3, VE3-4, VE3-5, VE3-6, VE3-7, VE4, VE4-1, VE4-2, VE4-3, VE4-4, VE5, VE5-2, VE7, VE8, VE9, VE12, VE12-1, VE13-ED, VE13-1, VE13-2, VE13-3, VE14-1, VE14-2, VE14-3, VE15-1, VE18-1, VE19-1, VE20-2, VE20-3, VE23, VE23-1, VE25-1, VE29-1, VE30-1, VE31-1, VE32-1, VE40-3, VE40-5, VE41-5, VE41-8, VE41-9, VE42-1, VE42-4, VE42-7, VE42-9, VE43-1, VE43-2, VE43-3, VE43-4, VE43-5, VE43-6, VE43-7, VE43-8, the estimated shadow cast duration does not exceed the threshold of 30 hours/year and 30 minutes/day of shadow cast in a residential setting.

Based on a cumulative analysis of shadow cast of the wind farm and the PEA Development Options I and II proposed in the vicinity, taking into account the shadow shut-down mechanisms at these wind turbines: For Development Option I – VE1R-11, VE2, VE3, VE3-1, VE3-2, VE3-3, VE3-4, VE3-5, VE3-6, VE3-7, VE4, VE4-1, VE4-2, VE4-3, VE4-4, VE5, VE5-2, VE7, VE8, VE9, VE12, VE12-1, VE13-ED, VE13-1, VE13-2, VE13-3, VE14-1, VE14-2, VE14-3, VE18-1, VE19-1, VE20-3, VE23, VE23-1, VE25-1, VE30-1, VE31-1, VE32-1;For Development Option II – VE1R-11, VE2, VE3, VE3-1, VE3-2, VE3-3, VE3-4, VE3-5, VE3-6, VE3-7, VE4, VE4-1, VE4-2, VE4-3, VE4-4, VE5, VE5-2, VE7, VE8, VE9, VE12, VE12-1, VE13-ED, VE13-1, VE13-2, VE13-3, VE14-1, VE14-2, VE14-3, VE15-1, VE18-1, VE19-1, VE20-2, VE20-3, VE23, VE23-1, VE25-1, VE29-1, VE30-1, VE31-1, VE32-1, VE40-3, VE40-5, VE41-5, VE41-8, VE41-9, VE42-1, VE42-4, VE42-7, VE42-9, VE43-1, VE43-2, VE43-3, VE43-4, VE43-5, VE43-6, VE43-7, VE43-8,the estimated shadow cast duration does not exceed the threshold of 30 hours/year and 30 minutes/day of shadow flicker in a residential setting.

Information on PEA risks due to extreme events and situations

The collapse zone is calculated by multiplying the total height of the wind turbine by a factor of 1.2 ($280 \times 1.2 = 336 \text{ m}$). The buildings and structures up to 336 m away that fall within the potential collapse zone of the wind turbine towers are relevant for the risk assessment. There are no residential buildings in this zone, so damage to residential buildings in the event of collapses

is unforeseeable.

The following risk management measures will be applied to prevent the possibility of fire and other emergencies: wind turbines will be equipped with storm control mechanisms to reduce the rotation speed of the wind turbine blades in strong winds (wind speeds greater than 28 m/s); each wind turbine will be equipped with a lightning protection system that transfers the electrical charge to the foundation of the structure (earthing system); and a signalling lighting system will be installed in each wind turbine.

In accordance with the map of territories of the Republic of Lithuania, where design and construction works of wind turbines (high-rise structures) may be restricted, approved by the Order of 15th February 2016 of the Chief of Defence of the Republic of Lithuania No. V - 217 "On Approval of the Map of the Territories of the Republic of Lithuania where the Design and Construction of Wind Turbines (High-Rise Structures) may be Restricted", the territory of the proposed wind farm located in the north-eastern part of the country falls within the territories where the installation sites of the wind turbines can be coordinated only on condition that the energy producer signs an agreement with the Lithuanian Armed Forces on the compensation of a part of the investments and other costs for the provision of the functions of national security. The Lithuanian Armed Forces has submitted a letter No. KVS-163 of 26 April 2021 that it would approve the wind turbines having a total height of: 220 to 280 m - in area 1; 200 to 280 m - in area 2 (inclusive), including the fans; subject to the conditions that the total height of the wind turbines, including the fans, cannot be increased in the future; that the wind turbines (including their fans) will not be constructed in the part of area 2 that is marked in red; and that the producer of renewable energy shall submit to the authority which has issued the spatial planning conditions, at the latest before the issuance of the construction permit, an approved construction project and sign an agreement with that authority on the payment of compensation for part of the investments and other costs necessary to ensure the performance of national security functions, as well as on the provision of a bank guarantee or a warranty letter from an insurance company to secure the fulfilment of this obligation.

The proposed wind turbine site does not fall within the Barysiai Aerodrome Protection Zone. The nearest planned wind turbine is approximately 9.2 km from the aerodrome protection zone.

6. Measures to avoid, reduce, compensate for and remedy any significant adverse environmental effects:

6.1. Before the start of operations:

6.1.1. The wind farm will have a bird and bat monitoring programme prepared and agreed with the Environmental Protection Agency to assess the impact of the wind farm on migrating, breeding birds and breeding and migrating bats before the commencement of operations. The programme must cover at least one year before the start of wind farm construction, throughout the construction and three years after the start of wind farm operations. Prior to the start of the activity, the developer will be required to submit a map of the areas to be restored and documents proving the developer's right to dispose of these areas throughout the duration of the implementation of the measure together with the monitoring programme.

6.1.2. Wind turbines, wind turbine construction and machinery storage sites will not be located in the coastal protection zones of surface water bodies.

6.1.3. In order to prevent groundwater contamination and possible emergency spills (eg fuel or oil spills from construction machinery), oil-absorbent materials (sawdust, sand, factory sorbents, etc) will be stored on the construction site. Special containers will be provided for the collection of liquid and other chemical waste.

6.1.4. The wind farm cable lines will be constructed at the intersections with water bodies by closed trenching, ie the stream channels will not be disturbed by open trenching. In the event of a need to run the cable parallel to a surface water body, the cable route will be diverted beyond the boundary of the surface water body's coastal buffer strip.

6.1.5. Drainage systems and facilities within the area of the wind turbines, access roads or cables will be protected to the maximum extent possible and will be properly repaired/restored at

the expense of the organiser of the planned activity in the event that they are damaged during construction works.

6.1.6. The construction phase will include the cleaning of local roads, the irrigation of the road surface, and the use of dust binders to prevent secondary particulate pollution in extremely dry weather during the warm season. During construction, construction waste will only be transported in enclosed vehicles to minimise dust, and the wheels of the vehicles will be cleaned and washed before leaving the construction area.

6.1.7. At wind turbine installation sites, the top fertile layer of soil will be stripped and stored separately before excavation and will be used for clearance of the maintenance site and surrounding areas after excavation is completed.

6.1.8. The wind tower sites, and the internal access roads will be chosen in such a way as to preserve the existing field forests and plantation groups in the area. The routing of the wind turbine feeder cables shall be planned in such a way as to avoid deforestation and to preserve small patches of woodland and/or individual trees.

6.1.9. To minimise the impact on the landscape, wind farms are painted in light colours, with a special paint composition to avoid glossing and reflections on the structures.

6.1.10. Once the construction work is completed, the contractor will clean up the sites and agricultural land to make them fit for purpose. If crops are destroyed during the works, they will be compensated (paid for) in accordance with an agreement with the landowner.

6.1.11. The planned wind turbines will be equipped with a windward fan to avoid infrasound generation.

6.1.12. Activities that may physically damage the valuable properties of cultural heritage objects and may interfere with the view of cultural heritage objects shall not be planned in the territories of cultural heritage objects and their protection zones. In the case of excavation work for the wind farm installation, if archaeological finds are discovered, the municipality's heritage protection unit must be notified.

6.2. During the operational phase:

6.2.1. Once operational, the monitoring programme will be applied to monitor the mortality of birds and bats to determine the significance of the potential impact of specific wind turbines and to propose the most effective measures to avoid, reduce to insignificance, or compensate it. The monitoring surveys are repeated every 5 years thereafter.

6.2.2. Where significant impact is identified, the affected wind turbine shall be shut down for the duration of the impact until mitigation measures agreed with the Environmental Protection Agency are implemented. Once additional measures agreed with the Environmental Protection Agency have been put in place, their effectiveness will be monitored until it is satisfied that the additional measures applied are effective in preventing significant impact. If the impact remains significant with all tested mitigation measures, the wind farm cannot be operated during the period when it may have a significant impact on biodiversity.

6.2.3. In order to reduce the potential negative impact on birds and bats, the most dangerous wind turbines VE29-1, VE40-3, VE41-5, VE41-8, VE41-9, VE42-9, VE43-6, VE43-7 have been removed.

6.2.4. To reduce the potential for significant migrating bat fatalities under wind turbines (if more than 3 dead bats are found under wind turbines in 5 days during monitoring), the minimum wind speed of such a wind turbine start-up is to increase to 6 m/s. For individual wind turbines or groups of wind turbines, the measure will be applied if a significant impact on bat migration is identified during the bat migration period in the absence of rain (nights of August 1–31, when the migration of sensitive bat species is the most intense), with the measure being applied from sunset to sunrise. The appropriateness of the measure during migration needs to be clarified by monitoring under each wind turbine group or individual wind turbines. Also, advances in technology can be applied to the intelligent control of wind turbines for the potential reduction of bat fatalities, eg Wildlife Acoustics' Song Meter with Analysis and Remote Transfer (SMART) system. When a significant number of bat ultrasounds are detected in the environment, the wind turbines are switched off.

6.2.5. Of the total number of proposed wind turbines under both options, 22 proposed wind turbines fall within the 200 m buffer from the forest and 24 proposed wind turbines fall within the 200 m buffer from the water body. In total, 35 proposed wind turbines fall within at least one 200 m buffer zone. Of these, 10 wind turbines will be scrapped: VE20-2, VE29-1, VE40-3, VE41-8, VE42-1, VE42-7, VE42-9, VE43-4, VE43-7, VE43-9. The remaining 25 wind turbines (VE1R-11, VE3-1, VE3-2, VE3-3, VE3-4, VE3-5, VE4, VE4-2, VE4-3, VE4-4, VE5-1, VE9, VE12, VE12-2, VE13-2, VE13-3, VE14-1, VE18-1, VE19-1, VE20-3, VE23, VE23-1, VE30-1, VE 31-1, VE32-1) from the start of their operation (during the bat breeding season from 15 May to 31 July) will be subject to a mitigation measure – wind turbine shutdown when wind speeds are up to 6 m/s and it is not raining at night, there is no fog, air temperature is above 10 degrees Celsius; or smart control of wind turbines will be installed to reduce potential bat fatalities, eg Wildlife Acoustics' Song Meter with Analysis and Remote Transfer (SMART) system, where an ultrasonic detector will record actual bat activity and the wind turbine will be switched off during the most active times of the day as required. After additional monitoring of bats during the breeding season at these 25 wind turbines (before the start of the wind turbine operations), in coordination with the Environmental Protection Agency, the measure will be exempted from the wind turbines, whose environment according to the results of the monitoring is not important for breeding bats. After the commissioning of wind turbines in the wind farm, the potential impact on breeding bats will be monitored and adjusted in coordination with the Environmental Protection Agency according to the results of the impact mitigation measures.

6.2.6. Installation of bird detection equipment – radar/special detector or video equipment – in wind turbines that may cause or contribute to a significant impact: special equipment is installed to stop the wind turbine from operating or otherwise reduce the potential for bird strikes if an approaching bird is detected in the vicinity of the wind turbine (remotely identified). The technical parameters of the measure will be selected during the technical design phase, based on the offers available on the market. Wind turbines where this measure will need to be introduced from the start of the wind turbine's operation: VE12-1, VE12-2, VE3-1, VE2, VE2-2, VE23, VE23-1, VE25-1, VE13-ED, VE3, VE3-2, VE3-4, VE3-5, VE3-6, VE4, VE4-2, VE4-3, VE4-4, VE5-1, VE5-2.

Do not select devices that scare away birds by sound or visual signals as part of the technological measures to avoid harming bird nesting and feeding: 16 wind turbines located closest to the forest (up to 1 km away) – VE12-2, VE3-1, VE2, VE2-2, VE23, VE25-1, VE3, VE3- 2, VE3-4, VE3-6, VE4, VE4-2, VE4-3, VE4-4, VE5-1, VE5-2.

6.2.7. The identified bird migration through the respective wind turbines (VE 5-1, VE 43-2, VE 12-1, VE 43-3, VE 31-1 and VE 13-1) may require measures in the case that a significant negative impact is identified. In this case, the further development of wind turbines VE 43-2, VE 43-3 is scrapped, and if a significant negative impact is identified under the remaining wind turbines VE 5-1, VE 12-1, VE 13-1 and VE 31-1, the wind turbines will be shut down for the bird migration periods from 15 March to 15 May and from 15 July to 31 October.

6.2.8. It will contribute to the conservation of rare and vulnerable bird species through monitoring and surveillance by remote telemetry devices. Six telemetry devices (transmitters) are to be placed on birds (birds of prey) breeding in the vicinity that are sensitive to the impact of wind turbines and the movements of sensitive species, the areas used on site before construction and during the use of the wind turbines are to be monitored. This will provide information on conflicts arising from wind turbines and on their possible management. The knowledge gained will be put into practice in mitigating the impact of wind turbines on sensitive bird species, determining wind turbine stopping times, hazardous flight altitudes, and finding other effective means of avoiding bird collisions with wind turbines. The work will be carried out by ornithologists with bird ringing permits and experience in capturing and ringing birds of prey. The number of transmitters was chosen based on the number and distribution of breeding birds of prey in the area and the ability to tag the birds in a way that minimises the stress on them.

6.2.9. Nests of birds of prey will be looked for within 2 km of the proposed wind farms and their coordinates will be entered into SRIS. All protected bird nests will be found and entered into the database. Such data will allow us to better protect them during deforestation and will also assess the impact of wind turbines on the breeding success of sensitive species. The data collected will allow the application of more effective mitigation measures.

6.2.10. Habitats near wind turbines will be altered, making them less attractive to sensitive bird or bat species. They will be replaced with crops that are common in farming, such as maize or oilseed rape.

6.2.11. Natural habitats will be restored in cultivated fields away from wind turbines, making them attractive to birds of prey and other biodiversity. A total of at least 15 hectares will be restored, with a minimum of 0.35 hectares per wind turbine. Areas will be left to regenerate naturally in the various areas of the proposed wind farm or outside it. The grasslands will be maintained for as long as the wind farm is operational.

6.2.12. Birdhouses will be erected for kestrels (based on the condition that the occupancy rate of birdhouses is 11% of the total number of birdhouses erected, it is proposed to erect 1 new birdhouse for kestrels on individual trees or overhead pylons outside the wind farms for each group of 6 wind farms) and bats (at least 1 birdhouse for each wind turbine under construction, with a maximum of 3 per tree outside the wind farm) on individual trees or overhead pylons.

6.2.13. Artificial nesting platforms for sensitive birds of prey species will be installed and repaired in the state forests of Pakruojis district municipality outside the wind farm: 1 artificial nesting platform for black storks, 3 for lesser spotted eagles and 5 for common buzzards (artificial platforms may also be occupied by other birds of prey).

6.2.14. 10 units of cavity birdhouses for bats or forest birds in the surrounding areas of the wind farm will be erected.

6.2.15. At least 15 white storks' nests in the municipality of Pakruojis dist. shall be erected and repaired within the first 3 years of operation of the wind farm, and at least 15 white storks' nests in Pakruojis distr. municipality shall be maintained during the lifetime of the wind farm.

6.2.16. To reduce noise in the case of Development Option I and II for the PEA, a limitation on the maximum sound power output of each wind farm is established – VE3 – 105 dBA; VE8, VE9, VE13-1 – 106 dBA; VE1R-11 – 106,2 dBA; VE13-3 – 106,3 dBA; VE32-1 – 106,5 dBA; VE17-1, VE20-3 – 106,7 dBA; VE30-1 – 106,8 dBA; VE5 – 106,9 dBA; VE2, VE3-3, VE4-3, VE13, VE14-1 – 107 dBA; VE5-2 – 107,1 dBA.

6.2.17. Shadow cast is to be reduced at all wind farms whose operation may result in an exceedance of the permitted shadow cast duration in the residential area (in the case of Development Option I – VE1R-11, VE2, VE3, VE3-1, VE3-2, VE3-3, VE3-4, VE3-5, VE3-6, VE3-7, VE4, VE4-1, VE4-2, VE4-3, VE4- 4, VE5, VE5-2, VE7, VE8, VE9, VE12, VE12-1, VE13-ED, VE13-1, VE13-2, VE13-3, VE14-1, VE14-2, VE14-3, VE18-1, VE19-1, VE20-3, VE23, VE23-1, VE25-1, VE30-1, VE31-1, VE32-

1;For Development Option II – VE1R-11, VE2, VE3, VE3-1, VE3-2, VE3-3, VE3-4, VE3-5, VE3-6, VE3-7, VE4, VE4-1, VE4-2, VE4-3, VE4-4, VE5, VE5-2, VE7, VE8, VE9, VE12, VE12- 1, VE13-ED, VE13-1, VE13-2, VE13-3, VE14-1, VE14-2, VE14-3, VE15-1, VE18-1, VE19-1, VE20-2, VE20-3, VE23, VE23-1, VE25-1, VE29-1, VE30-1, VE31-1, VE32-1, VE40-3, VE40-5, VE41-5, VE41-8, VE41-9, VE42-1, VE42-4, VE42-7, VE42-9, VE43-1, VE43-2, VE43-3, VE43-4, VE43-5, VE43-6, VE43-7, VE43-8)measures to reduce shadow cast are to be applied. During the technical design process, once a specific wind turbine model and its parameters (tower height, rotor diameter) have been selected, the developer will carry out repeated shadow cast calculations and adjust the proposed shadow shut-down mechanisms accordingly based on the new calculations.

6.3. during the winding-down phase.

6.3.1. The dismantled wind turbines will be dismantled down to their individual parts and transported to a storage or disposal site, together with the dismantling of the foundations of the wind turbines, the dismantling and recultivation of the wind turbine sites, the wind turbine access roads and the restoration of the environment to its previous state.

7. Brief description of the environmental monitoring measures.

Monitoring of birds and bats shall be carried out in accordance with the monitoring plan specified in section 2.11 Monitoring of the EIA report.

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8. Summary of the findings of the Environmental Impact Assessment Bodies

8.1. The nature of the findings on the environmental impact of the PEAA, submitted by the Pakruojis District Municipality Administration in its letter No. S-3163 (18.1) dated 04/08/2023: in favour of the Development Option I.

8.2. The nature of the findings on the environmental impact of the PEA, submitted by the Joniškis District Municipality Administration in its letter No (3.17 E)S-2941 dated 19/07/2023: in favour.

8.3. The nature of the findings on the environmental impact of the PEA, submitted by the Šiauliai Department of the National Public Health Centre under the Ministry of Health, in its letter No. (6 14.3.3 Mr)2-34741, dated 24/07/2023: in favour of Development Options I and II.

8.4. The nature of the findings on the environmental impact of the PEA submitted by the Šiauliai Territorial Division of the Department of Cultural Heritage under the Ministry of Culture in its letter No. (9.38-Š E)2Š-396 dated 24/07/2023: in favour of the "zero" and Development Option I.

8.5. The nature of the findings on the environmental impact of the PEA submitted by the Šiauliai Fire and Rescue Board of the Fire Protection and Rescue Department under the Ministry of the Interior in its letter No. 9.4-6-755 /2023(11.6.76 E) dated 27/07/2023: in favour.

8.6. The nature of the findings on the environmental impact of the PEA submitted by the State Service for Protected Areas under the Ministry of the Environment in its letter No. V3-1479 dated 11/08/2023: in favour of the development of PEA Option I.

8.7. The nature of the findings on the environmental impact of the PEA submitted by the Lithuanian Geological Survey under the Ministry of the Environment in its letter No (7)-1-7-4472 dated 02/10/2023: in favour.

9. Public information and participation

On 03/02/2023, the Environment Agency published a notice of commencement of the EIA on its website <u>https://aaa.lrv.lt</u>.

The Notice of Commencement of the EIA has been published: On the Pakruojis district municipality's notice board and website (on 03/02/2023), on Joniškis district municipality's notice board and website (on 03/02/2023), on the notice boards of Pašvitinis and Žeimelis wards of Pakruojis district municipality administration (on 03/02/2023), on the notice boards of Kepaliai and Gataučiai wards of Joniškis district municipality administration (on 02/02/2023), in the newspaper of Pakruojis district "Auksinė varpa" No. 10 (9075) (on 04/02/2023),

in the newspaper of Joniškis district "Sidabrė" No. 10(10148) (on 04/02/2023), and on the website of the report's originator, the Public Enterprise Institute of Coastal Research and Planning (on 02/02/2023).

On 01/03/2023, the Environmental Protection Agency published a notice of commencement of the EIA on its website <u>https://aaa.lrv.lt</u>.

Information on access to the report, the possibility to submit proposals and to participate in the public consultation on the report has been published: On Pakruojis district municipality's notice board and website (on 28/02/2023), on the notice board of Pašvitinis ward of Pakruojis district municipality administration (on 28/02/2023), on the notice board of Žeimelis ward of Pakruojis district municipality administration (on 27/02/2023), on the notice board of the Kepaliai ward of the Joniškis district municipality administration (on 27/02/2023), in the Pakruojis District newspaper "Auksinė varpa" (01/03/2023), on the website of the originator of the report Public Enterprise Institute of Coastal Research and Planning (on 27/02/2023)

No suggestions were received from the interested public before the public consultation on the report.

A public presentation of the report took place in a hybrid format on 30 March 2023 at 17:00, in Pakruojis municipality, in the hall of Pašvitinis ward, 2nd floor and by online video broadcast.

The Environmental Protection Agency made the report available to the public on its website <u>https://aaa.lrv.lt</u> on 14/08/2023. The Environmental Protection Agency did not receive any comments or suggestions from the public concerned within the deadline.

10. Transboundary environmental impact assessment

The nearest wind turbine installation site to the national border with Latvia is 5.0 km away. The specialists of the Ministry of the Environment, having examined the enquiry submitted by the Environmental Protection Agency by letter No. (30-2)-A4E-1331, dated 07/02/2023, regarding the application of the transboundary environmental impact assessment procedures to the PEA, on 14/02/2023 submitted a letter No. D8(E)-922, informing that no significant adverse transboundary effects are expected and therefore no transboundary environmental impact assessment procedures are required.

11. Conditions for the implementation of the proposed economic activity in relation to the environmental impact assessment carried out:

11.1. before the start of operations:

11.1.1. to carry out bird and bat monitoring in the area of the PEA (background monitoring) at least one year prior to the start of construction.

11.1.2. first, to construct access roads to the proposed wind turbine construction sites, and then, to reconstruct the drainage networks in accordance with a project agreed with the Pakruojis District Municipality's Department of Agriculture.

11.2. during the operational phase:

11.2.1. If the impact on biodiversity remains significant after all additional mitigation measures have been implemented, the wind turbine must not be operated during the period in which it is likely to have a significant impact on biodiversity. Also, if significant impacts are identified, the wind turbine cannot be operated until the mitigation measures are in place.

11.2.2. During the implementation of the PEA, it must be ensured that the noise limit values set out in the Lithuanian hygiene standard HN 33:2011 "Noise Limit Values in Residential and Public Buildings and their Surroundings", approved by the Order of the Ministry of Health of the Republic of Lithuania No V-604, dated 13 June 2011 "On the Approval of the Lithuanian Hygienic Standard HN 33:2011 "Noise Limits in Residential and Public Buildings and their Surroundings" (hereinafter referred to as HN 33:2011), are not exceeded. Should the noise limits be exceeded, measures to avoid, reduce and/or compensate for significant negative impact must be provided.

11.2.3. During the implementation of the PEA, the shadow cast threshold level recommended in the German standards (maximum 30 hours/year or 30 minutes/day) in residential areas, as chosen by the EIA document originators, cannot be exceeded. If the recommended threshold level of shadow cast in residential areas is exceeded, a shadow mitigation (shadow shutdown) mechanism must be applied.

11.2.4. To conduct monitoring of birds and bats in the PEA area, including assessment of dead birds and bats for at least the first three years (wind farm impact monitoring); and to conduct the monitoring for at least one year 5 years after the last survey, and repeat every 5 years.

11.2.5. If, during the course of the activity, it becomes apparent that the environmental impact is higher than the indicators presented in the environmental impact assessment report or set out in the legislation, the operator will be required to immediately apply additional measures to reduce the environmental impact or to reduce the scope of the activity/discontinue the activity.

11.3. during the winding-down phase:

11.3.1. Cleaning up the site, removing construction waste, dismantling the foundations of the wind turbines, and restoring the area (ground surface) of the former structures (wind turbines) to its pre-construction state.

11.4. The sponsor of the PEA shall be obliged to implement and enforce, at its own expense, the measures provided for in the report and in point 6 of this Decision to avoid, reduce, compensate for or remedy any adverse environmental effects.

12. Reasons for the decision on the environmental impact of the proposed economic activity:

12.1. The EIA bodies that have examined the report and presented their conclusions: Pakruojis district municipal administration, Joniškis district municipal administration, Šiauliai

Department of the National Public Health Centre under the Ministry of Health, Šiauliai Territorial Division of the Department of Cultural Heritage under the Ministry of Culture, Šiauliai Fire and Rescue Board of the Fire Protection and Rescue Department under the Ministry of the Interior, the State Service for Protected Areas under the Ministry of the Environment, and the Lithuanian Geological Survey under the Ministry of the Environment have submitted positive findings on the environmental impact of the PEA.

12.2. Wind turbines are not planned in protected areas, Natura 2000 sites or their buffer zones. The land plots researched in the PEA are located within 0.35 km of the nearest protected area (Laumekiai Botanical Reserve) and within 0.3 km of the nearest European Ecological Network Natura 2000 site (the Laumekiai Forest Site which is significant for the conservation of habitats). Subject to the avoidance, minimisation and compensation measures of impact on biodiversity and landscape set out in the PEA report, the PEA will not have a significant impact on protected natural values.

12.3. Subject to the mitigation measures of impact on birds and bats set out in Chapter 6 of this Decision and the conditions set out in Chapter 11 of this Decision, no significant negative impact on birds and bats is anticipated.

12.4. According to the Landscape Visual Aesthetic Potential Map of the Management Plan, wind turbines are excluded from the 27 areas and sites of exceptionally protected visual aesthetic potential and the 27 areas of particularly protected national visual aesthetic potential, as well as from areas having very high and high aesthetic potential, particularly and moderately distinctive landscapes. The site falls within the visual landscape structure types indexed as V0H3-c and V0H2-d. The construction of the proposed wind farm with 180-metre-high mast wind turbines would result in a regulated significant landscape impact distance of 10 x 180 m, ie up to \sim 1.8 km. There are no areas of particularly protected landscape or particularly prominent landscape complexes or panoramic viewpoints within 1.8 km of the researched wind turbine installation sites. The proposed wind turbines are located at a distance of more than 8 km from the country's most valuable panoramic viewpoint No. 150 Tričiai Mound (viewpoint), located in Tričiai village, Linkuva ward, Pakruojis distr. municipality, therefore the impact on the landscape is not considered significant.

To assess whether the proposed wind turbines can be visually seen from important landscape viewpoints, an assessment of the vertical angle of view was carried out. It is estimated that the installation of wind turbines with a total height of 280 m would create an area at a distance of up to 5.6 km from the wind turbines where the vertical viewing angle could exceed the 2.80° degree limit. There are no significant landscape viewpoints at this distance.

12.5. Green energy is an alternative to the use of non-renewable resources and the reduction of environmental pollution.

12.6. Noise dispersion calculations made by the software application WindPRO show that the noise level generated due to the PEA in the immediate residential area will be up to 43.6 dBA for Development Option I and up to 43.8 dBA for Development Option II. The assessment of the interaction of the PEA with the wind turbines proposed in the vicinity and the cumulative noise calculations show that noise levels in the nearest residential areas will reach up to 43.6 dBA for Development Option I and up to 43.8 dBA for Development Option II. Based on the noise dispersion calculations, the noise levels generated by the PEA and the wind turbines planned in the vicinity of the PEA will not exceed the noise limit values set out in the HN 33:2011 in the nearest residential environment.

12.7. There are no methodologies or hygiene standards developed and approved in Lithuania for assessing the impact of shadow cast, so the permissible shadow cast limit recommended by German standards is adopted as the permissible shadow cast level, ie a maximum of 30 hours/year or 30 minutes/day. The WindPRO modelling of shadow dispersion has shown that the shadow cast duration in the vicinity of the nearest residential properties will not exceed the threshold shadow duration of 30 hours/year and 30 minutes/day after the application of shadow shut-down mechanism. During the technical design process, once a specific wind turbine model and its parameters (tower height, rotor diameter) have been selected, the developer will carry out repeated shadow cast calculations and adjust the proposed shadow shutdown measures accordingly based on the new calculations.

12.8. All construction waste generated during the installation/construction of wind turbines, the installation of maintenance sites, and the installation of foundations is sorted and stored in containers until it can be removed and handed over to waste handlers. During operation, waste can only be generated during repairs and will be transferred to waste managers. During decommissioning, dismantled technological equipment and individual equipment parts shall be taken to a storage, recycling or collection facility specified by the activity organiser or delivered to a waste collection company authorised to handle such waste. The wind towers, the generator and all metal parts are disposed of in a scrap yard. The wings and fibreglass and other parts will be handed over to a waste collection company authorised to handle such waste. The foundations would be dismantled, and the metal and concrete segments separated and delivered to a waste collection company authorised to handle such waste.

12.9. No use will be made of water, land, soil and/or biodiversity resources. The use and storage of chemicals and preparations (including hazardous chemicals/preparations), radioactive substances, hazardous/non-hazardous waste is not foreseen in the course of the PEA. The PEA will use one of the alternative energy sources – wind energy.

12.10. The Environmental Protection Agency did not receive any comments on the EIA and the report from the interested public within the statutory deadline.

13. Option(s) supported or opposed

According to the report, based on the assessment of the conclusions of the EIA bodies, Development Option I is supported.

14. Nature of the decision on the environmental impact of the proposed economic activity

After examination and evaluation of the report, the assessment of the suggestions of the public concerned, on the basis of the conclusions of the EIA bodies, in the light of the reasons set out above, and in accordance with Article 12(1)(2) of the EIA Act, a decision shall be taken: The PEA by UAB Baltic Energy Group, that is the installation and operation of the wind farm in the municipality of Pakruojis district, Pašvitinis and Žeimelis wards, according to Development Option I, upon fulfilling the measures and conditions set out in Paragraphs 6 and 11 of this Decision, **complies with** the requirements of the legal acts on the protection of the environment, public health, the protection of the immovable heritage of culture, fire safety and civil protection.

According to the information provided in the report, with the use of measures mitigating the impact on the environment and subject to the conditions set out in point 11 of the Decision, the implementation of the PEA will not lead to any significant adverse effects on soil, land surface and subsurface, water, material assets, immovable cultural assets, biodiversity, landscape and the interaction between these elements; significant adverse effects on public health due to the biological, chemical and physical factors caused by the PEA; or significant negative impact on the environment and on the health of the public as a result of the risk of extreme events and situations arising from the PEA.

15. The decision is based on the following assessment report on environmental impact

The decision on the environmental impact of the PEA is based on the report submitted as part of this decision and published on the website of the Environmental Protection Agency <u>https://aaa.lrv.lt/</u> in the section *Fields of action* > *Environmental Impact Assessment (EIA)* > *Year* 2023 > 9. Information on decisions taken on the environmental impact of proposed economic activities in 2023.

> *Šiauliai County* or active link <u>https://drive.google.com/file/d/1JoeBS-</u> <u>9KhPKq3tqrH7GN-</u> <u>OC160SuSe14/view</u>.

16. Procedure for appealing against the decision on the environmental impact of a proposed economic activity

You have the right to appeal this decision to the Lithuanian Administrative Dispute Commission (Vilniaus St. 27, 01402 Vilnius) in accordance with the procedure established by the

Law of the Republic of Lithuania on the Procedure for Pre-Trial Examination of Administrative Disputes or to the Vilnius Regional Administrative Court (Žygimantų St. 2, 01102 Vilnius) in accordance with the procedure established by the Law of the Republic of Lithuania on Administrative Proceedings, within a period of one month from the day of its receipt or publication.

Director

Milda Račienė

Skirmantė Stankevičienė, phone 8 620 85561, email skirmante.stankeviciene@gamta.lt

DECISION OF THE ENVIRONMENTAL PROTECTION AGENCY ON THE INSTALLATION AND OPERATION OF A WIND FARM IN PAKRUOJIS DISTRICT LIST OF ADDRESSEES OF ENVIRONMENTAL IMPACT IN THE PAŠVITINIS AND ŽEIMELIS WARDS

Pakruojis district municipality administration, Sent via e-delivery

Joniškis district municipality administration, *Sent via e-delivery*

National Public Health Centre under the Ministry of Health Sent via e-delivery

Fire and Rescue Department under the Ministry of the Interior *Sent via e-delivery*

Department of Cultural Heritage under the Ministry of Culture Sent via e-delivery

State Service for Protected Areas under the Ministry of Environment *Sent via e-delivery*

Geological Survey of Lithuania under the Ministry of Environment *Sent via e-delivery*

Cc

Environmental Protection Department under the Ministry of the Environment *Sent via e-delivery*