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### **Consultation for Hiiumaa offshore wind farm being developed in the coastal waters of North-West of Estonia**

Ministry of the Environment of Estonia sent the supplemented and updated documentation of environmental impact assessment (hereinafter the “EIA”) of construction of offshore wind farm in North-West of Estonia to Ministry of the Environment of Finland (hereinafter the “Ministry”) on 15 March 2017. The Ministry submitted its comments on 19 May 2017.

Nelja Energia AS (hereinafter “**Nelja Energia**”) as the developer of the offshore wind farm would like to thank the Ministry for the participation in the consultation process conducted in accordance with the Espoo Convention. The input given by the Ministry is of significant importance.

Hereby Nelja Energia will answer to the main questions arisen in the consultation process.

#### Maritime traffic safety

During the development process of the offshore wind farm Nelja Energia has been in contact with Estonian Maritime Administration (hereinafter “EMA”). EMA has been advising Nelja Energia on maritime traffic safety issues. Nelja Energia assures that it will co-operate with the EMA in the future and shall act in accordance with the legislation on maritime traffic safety throughout the development and operation of the wind farm. Nelja Energia would like to emphasise that the project area is mainly located in shallow waters, being less than 30 m deep. Such areas are usually avoided by heavy ship traffic, because ships use deeper water for safe navigation. However, Nelja Energia assures that offshore wind farm area will be marked properly in the navigation charts and all safety precautions will be taken into account. Offshore wind farm will not have important impact on navigation safety in the region. GOFREP Ship Reporting System will be fully informed about the next phases of the offshore wind farm development process.

#### Anomalous radar echoes

The Ministry has pointed out that wind farms may cause anomalous radar echoes in television signals. Based on general knowledge about the interference, Nelja Energia sees this as an unimportant impact of the offshore wind farm and the issue will not be addressed in the EIA.

However, Nelja Energia will keep the issue in mind during further development of the technical project.

#### Impact on bats and birds

Nelja Energia is aware that the offshore wind farm area partly overlaps with the migration route of long-tailed duck and other species. Nelja Energia has conducted a thorough bird survey in order to get detailed information about birds migrating in the area, reduce possible negative impacts and implement necessary mitigation measures. The field survey was carried out in autumn 2014 and in winter, spring and summer 2015 by the experts of Estonian University of Life Sciences. The full survey report is enclosed to the environmental impact assessment (hereinafter the “EIA”) report as Annex 4. Mentioned Annex has been translated into English to carry out the consultation process in accordance with the Espoo Convention. The EIA includes the main results and conclusions of the bird survey. As a result of the bird survey it was concluded that negative impact on birds can be reduced by implementing proper mitigation measures. Nelja Energia has taken into account the results and conclusions of the bird survey, agreeing to implement the proposed mitigation measures and to not use the Apollo shallow as a wind farm development area.

Concerning impacts on bats, the EIA report will be supplemented, taking into account possible impacts on bats. Based on latest studies on bats in the Hiiumaa region and other wind farm areas, the following conclusions can be made. During bat surveys in the Hiiumaa region it has been detected that while gathering food, the bats could fly 1.2 km from the coast. It can be concluded that the bats won't be gathering food as far as 12 km from the coast where the offshore wind farm shall be located. Hence, it can be stated that mainly migrating bats can be impacted by the offshore wind farm. However, for flying long distances overseas, the bats need good weather conditions. The wind speed suitable for bats migration is about 4-5 m/s, during which the wind turbines operate at very low speed or are not operating at all. Wind turbines in general start to operate when the wind speed is more than 5 m/s.

Mitigation measures used in operating wind farms will be taken into account while developing the offshore wind farm. Bat detecting radar gives information on bats' migration period and enables the wind farm operator to stop operating the wind farm when bats' migration is detected by the radar. Such radar will be seriously considered as a possible mitigation measure. All in all, possible negative impacts on bats can be reduced by implementing proper mitigation measures. While considering potential mitigation measures, the Agreement on the Conservation of Populations of European Bats will be taken into account.

A detailed monitoring of impact on fauna and flora during the construction and the operating period of the wind farm will be discussed and agreed with the competent authority. Furthermore, all monitoring reports will be made publically available.


#### Impact on tourism

Hiiumaa is known for its untouched nature and green environment. Offshore wind farm located 12 km off coast can be considered as an additional tourist attraction which does not compromise the present tourism attractiveness of the island. Based on the visualisations made during the EIA, the offshore wind farm cannot be considered as a threat to Hiiumaa being continuously attractive to the tourists.

To conclude, Nelja Energia would like to thank the Ministry for the valuable input given in 2017 and also during commenting period in 2011-2012. All matters arisen in the letters of the Ministry have been addressed by Nelja Energia and accordingly the EIA report has been updated.

If any, please submit your opinions within ten (10) days after the Ministry has received this letter.

Yours sincerely,



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Nelja Energia AS