

# Appendix 3

Project areas, grid conditions and regulatory circumstances for Utsira Nord

# Contents

1.	General information	2
2.	Project areas	2
2	2.1 Wake effects	2
2	2.2 Anchoring of wind turbines	2
2	2.3 Weather radar	2
2	2.4 Capacity	2
3.	Seabed surveys in the project areas	3
4.	Bird surveys under the auspices of Seapop and Seatrack	3
5.	Mareano – seabed mapping programme	4
6.	Licensing process	4
7.	Grid connection	4
8.	Tax	6
9.	Utsira municipality	6
10.	HSE regulations	7
11.	Consortia and competitive conditions	7
12.	Collateral	7
13	Norwegian governing law	7



## 1. General information

This appendix provides summary background information for project areas in Utsira Nord. Among other things, the appendix discusses planned and completed surveys relating to the project area, grid conditions and regulatory conditions.

## 2. Project areas

#### 2.1 Wake effects

In order to limit wake effects, the Ministry has assumed a five-kilometre buffer zone between the project areas.

### 2.2 Anchoring of wind turbines

Anchoring of wind turbines to the seabed in the buffer zones between the project areas will be possible provided the anchors do not impede shipping in the area. The average depth in Utsira Nord is 265 metres. Draught varies between ships, but will generally not exceed 25 metres. It is assumed that anchors for floating turbines in Utsira Nord will be submerged to a depth that is sufficient to ensure that they do not impede shipping. Final anchoring will be assessed during the consideration of the licence application or detailed plan.

Anchoring must take place within the coordinates that delimit the Utsira Nord area.

#### 2.3 Weather radar

In connection with the consultation concerning qualitative criteria and the support scheme for Utsira Nord, input was received from the Norwegian Meteorological Institute which indicated that wind turbines in Utsira Nord could affect the radar signal of a weather radar located at Bømlo. Any impacts of the wind farms in Utsira Nord on the weather radar must be included in the project-specific impact assessments, and conditions may be imposed for the licence in order to mitigate any consequences for the weather radar.

#### 2.4 Capacity

The maximum permitted capacity for Utsira Nord is 1,500 MW. As part of a larger assignment to identify new areas for offshore renewable energy production, the Norwegian Water Resources and Energy Directorate (NVE), together with a directorate group, has been tasked with assessing whether there are grounds for increasing area utilisation in Sørlige Nordsjø II and Utsira Nord.<sup>1</sup> This assignment is due to be completed by 30 April 2023.

The Ministry refers to paragraph 2 III of the announcement document concerning possible capacity expansion of the project areas. The Ministry will assess the possibility of increases in the total capacity limit for Utsira Nord and the project areas after the assignment aimed at identifying areas has been submitted to the Ministry. The assessment will be carried out prior to the competition for state aid.

<sup>&</sup>lt;sup>1</sup> Assignment to identify new areas for renewable energy production and impact assessment (regjeringen.no)



## 3. Seabed surveys in the project areas

The State will conduct ground surveys for Utsira Nord during 2023. It is unlikely that the results of the ground surveys will be completed before the application deadline, but they will be made available to applicants as soon as possible.

Information on the various data types that will be collected for Utsira Nord is presented in Table 1. This is the same data that will be collected for Sørlige Nordsjø II. Information about access to the data will be published as soon as it becomes available.

The actors that are awarded the project areas for Utsira Nord will be charged the State's expenses for the seabed surveys associated with this project area. The cost of the surveys for Utsira Nord is estimated at NOK 38.7 million. The actors that are awarded areas will each cover one third of these costs.

Table 1: Description of the types of data that will be collected for Utsira Nord

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Investigation	Description		
2D Ultra-High-	2D high-resolution seismic data for mapping down to a depth of		
Resolution (UHR)	100-200 metres beneath the seabed. Mapping of channels where		
multi-channel seismics	there is a risk of unstable ground for foundations, a risk of		
	shallow gas deposits and boulders that could create problems for		
	foundations.		
	In 2022, a Sparker source with a receiver cable length of 160m		
	was used. For 2023, consideration will also be given to using a		
	mini air cannon as a possible source.		
Sub-bottom sonar	Sub-Bottom Profiler (SBP) data providing very high-resolution		
	seismic data down to 10-20 metres beneath the seabed. Will		
	identify where changes occur in stratification at the very top of		
	the subsurface, identification of boulders.		
Multibeam echo	Multibeam Echo Sounder (MBES) - bathymetry data maps the		
sounder (bathymetry)	seabed with a grid resolution of 1 metre.		
Back-scatter data	Back-scatters (reflection values) are collected to enable		
	classification of the seabed to identify where changes occur. This		
	helps to optimise the bathymetry data.		
MBES water column	MBES water column data will, among other things, enable gas		
data	bubbles in the water column to be mapped, which will indicate		
	the presence of gas leaks from the seabed.		
Magnetometer data	This data is used to identify bottom hazards such as shipwrecks,		
	existing pipelines, cables, UXO and other metal objects on or just		
	beneath the seabed.		
Side Scan Sonar (SSS)	A side scan sonar emits high-frequency sound pulses, producing		
data	data which will be used to identify bottom hazards such as oil-		
	and gas-related infrastructure (wells, pipelines, etc.), shipwrecks,		
	cables (power and communications), unexploded ordnance		
	(UXO) and boulders.		

**Source: Norwegian Petroleum Directorate** 

# 4. Bird surveys under the auspices of Seapop and Seatrack

In the 2023 National Budget, the Government has increased the appropriation for the seabird programme SEAPOP and Seatrack by NOK 10 million. This brings the Ministry's total appropriation for 2023 to NOK 13 million. The aim of the programme is to learn more about



the distribution, status and development of Norwegian seabird populations in light of human activity in the marine areas and the coastal zone.

In 2023, studies will be carried out to map seabird habitat use at different times of the year. During the summer months, this is done by fitting nesting birds with a GPS tracking device which sends data to a base station. Area use throughout the winter months is tracked using global location sensors (GLS) which are attached to the feet of nesting birds, and removed the following year. In 2023, the mapping of breeding populations of birds along the mainland coast of Southern Norway will also start, and mapping of the open ocean is planned. The current monitoring will be strengthened and expanded to enable any long-term effects on populations to be quantified. The areas in the southern parts of the North Sea are important wintering areas for auks. Studies to map the provenance of auks using DNA will be initiated, and the importance of the North Sea and Skagerrak as a feeding area for wintering auks will be quantified.

Data from the surveys will be made available on the Seapop and Seatrack website (seapop.no).

## 5. Mareano – seabed mapping programme

Through the Mareano mapping programme, data on depth, seabed conditions, biodiversity, habitats and pollution in the sediments of Norwegian coastal and marine areas are being collected, customised and made available to the public. The Norwegian Mapping Authority and Mareano plan to collect geological, biological and chemical data from Utsira Nord in 2023/2024.

## 6. Licensing process

The licensing process is set out in the Offshore Energy Act and the Energy Act and associated regulations. The Ministry will look into the possibility of shortening or simplifying the licensing process for offshore wind power, and will return to this matter at a later date. As part of this work, the Ministry will consider whether the detailed plan can be submitted and approved at the same time as the licence is assessed.

#### 7. Grid connection

Power production from Utsira Nord will be connected to the shore. Utsira Nord is located approximately 40 kilometres from the mainland, and the connection will therefore be made via an alternating current (AC) connection. There are several possible grid solutions. The Ministry will publish more project-relevant information during the period through to the application deadline for the qualitative competition. The "Infrastructure and development of offshore grids" working group under the *Offshore Wind Cooperation Forum* will hold an open information meeting on 10 May 2023. Statnett will also publish relevant information on its website.

Statnett is responsible for designating the connection point for the grid connection to the mainland. The Ministry refers to the letter from Statnett dated 1 December 2022, in which Statnett clarifies its recommendations concerning a connection point for Utsira Nord.<sup>2</sup> Statnett's primary recommendation is a coordinated grid solution which is connected to the new Karmøy substation. An application was submitted for a licence for Karmøy substation in

<sup>&</sup>lt;sup>2</sup> 2022-11-tilknytningspunkter-pa-land-for-sorlige-nordsjo-ii--og-utsira-nord.pdf (statnett.no)



September 2022 and is being considered by the Norwegian Water Resources and Energy Directorate (NVE). Statnett notes that, although Karmøy substation is the point on the transmission grid that is closest to Utsira Nord, there are also several other transmission substations in the area which could be relevant for connecting offshore wind from Utsira Nord. In the case of a distributed grid solution, Statnett notes that it could be an advantage to choose different connection points, and that the new Gismarvik station or Spanne station<sup>3</sup> could be of relevance. Statnett furthermore points out that the point that is recommended will depend on whether a joint landfall solution (*coordinated solution*) is established, or whether each actor establishes its own landfall solution (*distributed solution*).

The Ministry believes that there are a number of factors which indicate that a coordinated solution may be a rational approach, and that such an approach should be investigated further. In a normal connection process, an actor will contact the grid company about connection. In this case, it will take some time before it is clear who will be awarded project areas. In order to maintain the momentum, the Ministry will therefore ask Statnett to start the connection process by assessing the advantages and disadvantages of relevant landfall solutions. The details and guidelines for the study will be clarified between Statnett and the Ministry. More information about this will be posted at regjeringen.no.

The Ministry expects offshore wind actors to plan, construct, own and operate radials from the production facility to shore, via either a distributed solution or a coordinated solution. As part of the qualitative competition, the actors will therefore be assessed on whether they possess sufficient expertise and experience to plan, construct and operate grid installations. The Ministry emphasises that actors wishing to participate in the competition cannot expect every aspect relating to the grid solution to be known by the application deadline.

For grid solutions within the baseline the provisions of the Energy Act concerning connection obligations and investment contribution apply. Particular reference is made to Section 3-4a of the Energy Act and Chapter 16 of the Regulations on electricity grid operation.

For grid solutions outside the baseline, regulatory changes will be necessary which provide a legal basis for imposing requirements on grid owners for third party access. However, the Ministry does not propose that grid owners outside the baseline should be obliged to make investments (investment obligation) if a third party wishes to connect to the grid installation. In this way, it will be possible for offshore wind actors to enable consumption and/or production to be connected to their grid, but this will not be a requirement where adaptation of the grid installation will be required. The Ministry's view is that it should be up to the actors themselves to assess whether it is rational to facilitate for third parties.

Actors must assume that they will be required to cover all relevant grid costs for the energy installation. The developer must expect to pay an investment contribution in accordance with current regulations for onshore grid installations; cf. Chapter 16 of the Control Regulations.

<sup>&</sup>lt;sup>3</sup> An application has been submitted for the new Gismarvik station in connection with the new Blåfalli-Gismarvik power line. On 8 February 2023, the Norwegian Water Resources and Energy Directorate (NVE) sent a letter to the Ministry containing its recommendations concerning a licence. The licence application is being processed by the Ministry.



The Ministry will ask Statnett to prepare an estimate of which grid measures will be necessary, and the associated investment contribution linked to onshore grid expansion and upgrades. It must be assumed that the estimate is subject to uncertainty.

Pursuant to the Regulations concerning the system responsibility in the power system, Statnett has the legal authority to make decisions regarding connection points within the baseline. The Ministry will ensure necessary regulatory amendments so that Statnett is also authorised to impose conditions on the establishment and follow-up of functionality for production installations outside the baseline.

The Ministry will review the need for safety and preparedness requirements for offshore renewable energy production installations. This could, for example, be requirements regarding repair preparedness, a requirement for a 24-hour staffed operations centre and requirements regarding redundancy in communication equipment in connection with control of the installations. As a starting point, the Ministry will assume the same safety and emergency preparedness requirements as apply to onshore installations with similar installed capacity.

#### 8. Tax

Under the general provisions of the Taxation Act, revenues from wind power and other renewable energy resources will be taxable for companies domiciled for tax purposes in Norway. For persons and companies domiciled abroad for tax purposes, there is no such entitlement to taxation when the activity takes place outside the Norwegian territorial border at sea (outside the realm). On 21 February 2022, the Ministry of Finance circulated for consultation a proposal to introduce a tax liability for foreign persons and companies that take part in mineral activities, exploit renewable energy resources or exercise carbon management on the Norwegian continental shelf. It is proposed that the taxation authority be introduced as a limited tax liability in Section 2-3, first paragraph, of the Taxation Act. The proposal will ensure equal treatment of Norwegian and foreign actors and help to establish harmonised rules and ensure that society receives its share of value creation, regardless of the actor's domicile for tax purposes. Based on the consultation responses, there appears to be a need for a more detailed study of certain issues, including the proposal's relationship to related legislation in other tax legislation<sup>4</sup>. The Ministry of Finance therefore proposes that the proposal be submitted to the Storting during of 2023, with entry into force from the 2024 tax year.

Resource rent tax for local enterprises with extraordinary returns (economic rent) is a key of a growth-promoting tax system. Given the current outlook for costs and power prices for offshore wind, resource rent is not expected over time, and it is therefore not relevant for this government to introduce a resource rent tax.

# 9. Utsira municipality

Part of the project area for Utsira Nord lies within the boundaries of Utsira municipality. The Ministry believes it is right that the development of Utsira Nord benefits the Utsira community, and will consider in more detail how this can be ensured.

<sup>&</sup>lt;sup>4</sup> Cf. Prop. 1 LS (2022-2023)



## 10.HSE regulations

Petroleum Safety Authority Norway was delegated responsibility for regulating and supervising safety and the working environment in connection with offshore renewable energy production on 17 August 2020. Work to establish regulations covering the need for the regulation of activities is under way, and is being carried out in close dialogue with the parties represented in the Regulatory Forum, as well as other industry organisations and Norwegian and foreign authorities with similar or adjacent responsibilities.

The regulatory work is based on the fact that the regulations must be risk-based and system-oriented, and clarify the responsibility of actors in respect of the systematic follow-up of risk. Requirements should preferably be targeted and functional, with associated guidance. Petroleum Safety Authority Norway states that it will apply a principle for the use of recognised norms with references to international standards where these exist. Where relevant, existing legislation will be applied insofar as far as is possible and appropriate. It is assumed that the Working Environment Act will be made applicable to activities covered by the Offshore Energy Act, with the necessary exemptions and adaptations. A consultation on the draft regulations is planned for summer 2023, with entry into force on 1 January 2024.

## 11. Consortia and competitive conditions

Applicants are responsible for ensuring that cooperation with both actual and potential competitors takes place in accordance with the competition rules.

### 12. Collateral

The Ministry is working to secure a legal basis for the pledging of installations and licences pursuant to the Offshore Energy Act.

# 13. Norwegian governing law

The Ministry will consider imposing conditions for licences pursuant to the Offshore Energy Act which stipulate that activities carried out on the basis of the licences shall be governed by Norwegian law and carried out/designed in line with Norwegian contract traditions.