DET KONGELIGE
OLJE- OG ENERGIDEPARTEMENT

Appendix 3

Project area, grid connection and regulatory conditions for the first phase of Sørlige Nordsjø II

Contents

1. General information

This appendix provides summary background information for the project area for the first phase of Sørlige Nordsjø II. Among other things, the appendix discusses planned and completed surveys relating to the project area, grid conditions and regulatory conditions.

2. Project area

In connection with the consultation on prequalification criteria and the auction model for Sørlige Nordsjø II, the Ministry received a number of remarks indicating that the project area for the first phase was too large in relation to the maximum permitted capacity of 1,500 MW. Accordingly, the Ministry has reduced the project area somewhat in the west. The project area is now 520 km^2.

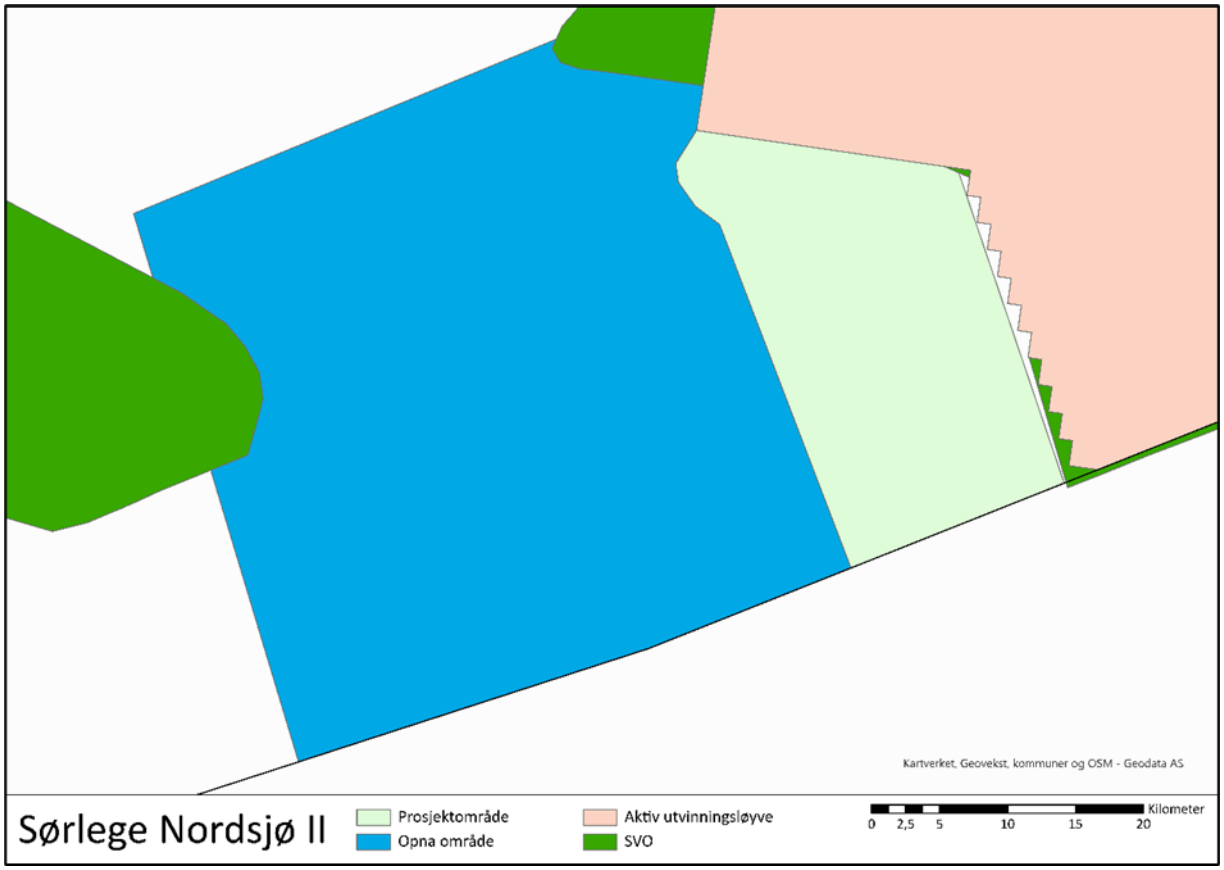

Figure 1: Illustration of the project area for the first phase of Sørlige Nordsjø II.

Wake effects

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

3. Seabed surveysin the project area

In autumn 2022, geophysical data was collected in the eastern part of Sørlige Nordsjø II in order to map the seabed, as well as the subsurface down to approx. 200 metres. A total of 2,174 line-kilometres of data was obtained, split between inlines and crosslines. The lines were collected with a line spacing of 200 metres, which is necessary in order to achieve an adequate mapping density. In addition, crosslines with a line spacing of 1,000 metres were collected, which is necessary in order to link the seismic data together when performing

further processing and interpretation. See the table below for more information on the seven types of data collected.

It is planned that the same types of data that were collected in 2022 will be collected for the remainder of the first phase, the southwestern part of Sørlige Nordsjø II and for Utsira Nord in 2023. The data collected in Sørlige Nordsjø II in 2022 will be made available to the actors.

A first (initial) interpretation/evaluation of the data will be ready early in the second quarter of 2023. Information about access to the data will be published as soon as it becomes available.

The actor that is awarded the project area for the first phase of Sørlige Nordsjø II will be charged the State's expenses for the seabed surveys associated with this project area. This cost includes NOK 28 million for the surveys conducted in 2022. In addition, there is a proportionate share of the cost of the planned site surveys in 2023, provisionally estimated at NOK 23.65 million for the first phase of SNII.

Table 1 Description of the types of data collected for the first phase of SNII in autumn 2022

Investigation	Description
2D Ultra-High-Resolution (UHR) multi-channel seismics	2D high-resolution seismic data for mapping down to a depth of 100-200 metres beneath the seabed. Mapping of channels where 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 sounder (bathymetry)	Multibeam Echo Sounder (MBES) - bathymetry data maps the 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 data	MBES water column data will, among other things, enable gas 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) data	A side scan sonar emits high-frequency sound pulses, producing 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. Data example attached below.

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 of Petroleum and Energy'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 will be 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 Sørlige Nordsjø II in 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, but will revert to this 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

Sørlige Nordsjø II is located about 200 kilometres from the nearest connection point in the transmission grid. The entire area lies outside the baseline, while the radial will be connected within the baseline to the onshore power grid. The Ministry will publish more project-relevant information during the period through to awarding of the project area. 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.

The Ministry emphasises that actors wishing to participate in the competition cannot expect every aspect relating to the grid solution to be known prior to awarding of the project area.

The Offshore Energy Act applies to Norwegian territorial waters outside the baseline, while the Energy Act applies within the baseline and on land. For grid installations *within* the baseline, the provisions of the Energy Act will apply. For grid installations *outside* the baseline, the provisions of the Offshore Energy Act will apply.

Grid solution and ownership

The first phase of Sørlige Nordsjø II will be connected to Norway via a radial. The Ministry assumes that the developer will be responsible for planning, constructing and financing the radial up to the designated connection point on land. The radial will be owned and operated by the developer for as long as it only serves the offshore wind farm, or a limited number of other users. In the event of the subsequent reclassification of the grid installation as a transmission grid, the installation will have to be transferred to Statnett. The remuneration and other conditions for the transfer during the support period will be governed by the contract for difference.

Connection point, investment contribution and reservation of capacity

Statnett is responsible for designating the connection point for the 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 Sørlige Nordsjø II.[1] Statnett recommends that Kvinesdal is used as the primary alternative for connecting the first phase of Sørlige Nordsjø II. Kvinesdal is the connection point closest to Sørlige Nordsjø II, and is a strong point in the grid where the first phase can be connected without any major measures. The new Mosby substation, close to the existing Kristiansand substation, is Statnett's secondary alternative to a connection point. No application has been submitted for a licence for the new Mosby substation.

The developer must expect to pay an investment contribution in accordance with the current regulations for onshore grid installations; cf. Chapter 16 of the Regulations on electricity grid operation. Well in advance of the awarding of the project area, 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.

Third party access – regulations

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

For grid installations 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

[1] 2022-11-tilknytningspunkter-pa-land-for-sorlige-nordsjo-ii--og-utsira-nord.pdf (statnett.no)

requirement where adaptation of the grid installation will be required. The Ministry's viewis that it should be up to the actors themselves to assess whether it is rational to facilitate for third parties.

In this regard, the Ministry also refers to ConocoPhillips' letter of 14 February 2023, which discusses the possibilities for electrifying the Ekofisk area. A copy of the letter will be published at regjeringen.no. In the letter, ConocoPhillips asks that offshore wind actors investigate an alternative which safeguards the possibility of electrifying petroleum installations, and notes that the commercial terms and conditions can then be matured after the area award. Any connection from the first phase of Sørlige Nordsjø II to Ekofisk will not alter the permitted maximum capacity in the project area or the right to state aid under the contract for difference.

System responsibility

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.

S*afety and preparedness*

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.

Maximum permissible loss of production

The Nordic synchronous area is dimensioned to cope with instantaneous power changes of up to 1,400 MW. This means that it is possible to cope with the loss of a single production unit, consumption unit, HVDC connection or other installation component which causes an instantaneous imbalance in the entire Nordic power system not exceeding this volume.

The limit of 1,400 MW is currently defined as a dimensioning event in the Nordic region, and is used to ensure that there is no risk of frequency drops greater than the system is able to handle. This means that the offshore wind farm can deliver a maximum of 1,400 MW of electrical power at the connection point.

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 need for a more detailed study of certain issues, including the proposal's relationship to related legislation in other tax legislation. 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. 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.

10. 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.

11. Collateral

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

12. 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.