

Report third workshop tender Borssele, October 15, 2014

Opening

The third workshop on the deployment of the Borssele wind farm zone aims at informing experts from the wind sector and getting feedback for the further developments. The workshop started with a plenary session with an update on the progress made so far. Then two parallel sessions took place. The subject of one session was the new subsidy schema for offshore wind (SDE+ regeling). The process and planning for the SDE+ tender at the end of 2015 and basic principles for the SDE+ tender for the new system for offshore wind were discussed. In the other workshop the developments for the framework to incorporate ecology and cumulative effects were discussed. Subjects were the progress made so far, the purpose of the framework and how cumulative effects, due to the realisation of the Energy Agreement, are incorporated in the decision making process.

The chair referred to the milestone that was achieved in September: The Dutch government has earmarked three areas for offshore wind farm development over the next few years. This decision will ensure that the aim of generating more wind energy specified in the Energy Agreement is achieved as quickly and cost-effectively as possible.

For the deployment of new offshore wind farms until 2023, as agreed upon in the Energy Agreement for Sustainable Growth, the government has decided to select developers as follows:

Tendering		Wind farm zone
Year	Capacity	
2015	700 MW	Borssele
2016	700 MW	Borssele
2017	700 MW	Hollandse Kust: Zuid-Holland
2018	700 MW	Hollandse Kust: Zuid-Holland
2019	700 MW	Hollandse Kust: Noord-Holland

Presentations:

The presentations on the general state of affairs of the offshore wind energy developments, the new subsidy scheme for offshore wind (SDE+) and the framework on ecology and cumulative effects have been enclosed as an annex to this report.

The following issues were discussed after the presentations:

- The new website <http://english.rvo.nl/topics/sustainability/offshore-wind-energy> was created especially for the Borssele wind farm zone. The website www.noordzeeloket.nl contains complete information on all issues at the North Sea, including wind energy. Both websites will be linked to each other.
- It is not yet decided if the tender will be open for 2x 350 MW or (maybe) 1x 700 MW and it is also not yet decided how long the tender will be open.
- Ecology and cumulative effects: the effects of the Belgian wind parks will be included in the calculations.

- In October/November expert meetings will be organised on birds, bats and underwater noise. In these meetings the knowledge and input from the wind energy companies and NWEA will be very welcome.
- The framework on ecology and cumulative effects will be drafted parallel to the preparation of the EIA. Information and scenarios will be exchanged between the teams working on both projects. The results of the framework will be used in the EIA.
- General information and information on ecology (including the framework) will be available on www.noordzeeloket.nl.

Workshop ecologie by Rob Gerits, Martine Graafland and Suzanne Lubbe

The goal of the workshop on ecology is to receive feedback and input on the approach that was chosen for the framework. The team gives a 'sneak preview' in the first results of the assessment. This information is not yet complete, but gives an idea of the design of the study and the possible results. The following issues were discussed after the presentation.

General part of the framework:

- In Europe there is not yet a solution for the problem of describing cumulative effects. The German authorities use legislation to avoid hearing damage due to underwater noise; that is mitigation. The project team did look at the fact what a similar solution would mean in the case of the Energy Agreement.
- The framework is not an EIA, but a method for assessing cumulative effects of the roadmap for wind energy. This will also give directions for site specific EIA's.
- Cumulative assessment would require insight in all future plans. But plans will in practice not be realized as foreseen. However the framework will be a 'living document' that will be updated when new insights are available.
- The framework will be incorporated in the National Water Plan 2 as an instrument for the determination of cumulative effects of wind parks. The ambition is to also look at the effects of other use than wind energy. If the effects exceeds a certain level, and the possibilities for mitigation are not sufficient, an ADC-test is required (find alternatives or compensation). Mitigation by exchanging offshore wind with other activities is not a very promising option yet.
- The assessment to create this framework is done because the Netherlands Commission for Environmental Assessment (NCEA) advised so. This request has no legal status, but in the case of a legal procedure the Council of State follows the advice of the NCEA which in practice gives it a legal force. On October 24 the scoping document for the Borssele EIA will be made available, which will also contain the scope of the assessment on ecology for Borssele (<http://www.rvo.nl/actueel/nieuws/notitie-reikwijdte-en-detailniveau-milieu-effectrapport-kavelbesluiten-borssele-ter-inzage>).
- The assessment cumulates all wind energy projects because it is not possible to do the assessment at local scale only, as it is done on land activities. Sea mammals use the whole sea, birds use the English part of the sea and the Dutch part. The situation at sea is different.

- The oil and gas industry get permits based on the local situation only and not related to cumulative effects. Coordination between governmental bodies is necessary.

Under water noise

- The area of the Gemini parks is being monitored for harbour porpoises. There will also be monitoring during construction of the parks. The reports will be published. There are more reports available on the experience in Germany and Belgium.
- It is not yet decided if a Dutch authority will be present during constructions to check if requirements/limitations are met. For now that is not necessary because of the fact that there are seasonal restrictions for piling activities. It might be necessary in future.
- The models that are being used for the framework are validated and are similar to the information on avoidance which is available from international research.
- Next year a social cost benefit analysis (MKBA) will be made on mitigation measures.
- In the UK there is evidence that after constructions, the population of sea mammals and other species increases. This information will be included in the assessment.
- Simultaneous piling at multiple locations that are close to each other is advantageous because the time and area of disturbance is shorter.

Birds and bats

- The operational situation of a wind park has impact on birds and bats, not the construction of the park.
- In the assessment the configuration will be considered: number and size of the turbines. If it turns out that it is necessary, there may be a maximum height specified.
- The results of the assessment will be available at the beginning of 2015.
- There was a discussion on the question if a 4D-distance is a realistic worst case scenario for collisions. Although 4D was a result of consultation of the wind energy industry, it may be necessary to make new calculations if this is not acceptable. It could be possible that 4D is worst case for habitat loss, but not for collision.
- It is not yet possible to determine - based on measurement in the Belgian wind parks - whether birds and bats will be an issue for Borssele.

The project team that works on the framework will organize an expert meeting on birds and bats In October and on underwater noise in November. NWEA will propose a delegation for the meetings.

Workshop 1: SDE+ by Marc Streefkerk

The goal of the workshop on SDE+ is to give information about the new system for SDE+ for offshore wind energy.

Summary of the new system:

Selection of developers

Developers who can build and operate wind farms on the sites will be selected by a tender procedures in which respectively the grant and the permit for constructing and operating a wind farm can be awarded.

To facilitate developers in competitive bids for the tenders, site data on the wind, water and soil conditions will be made available.

Grant

The Ministry of Economic Affairs will make a grant available for operating the wind farm, as part of the Encouraging Sustainable Energy Production Scheme (SDE+, Stimulerend Duurzame Energieproductie). Producers receive financial compensation for the electricity they generate for a fixed number of years.

The participants of the subsidy tender in parallel request for a permit. The winner of the subsidy tender will both be granted a permit and a subsidy.

Permit

A developer needs a permit based on the wind farm site decision already been taken. This permit allows him to construct and operate a wind farm on a site for which a site decision has been taken. This permit can only be obtained as part of the tender procedure for the grant. The permit will be awarded by the Ministry of Economic Affairs to the winner of the tender and defines the contours of the site and the conditions under which wind farms can be constructed and operated. The conditions will give maximum flexibility to developers in their wind farm design.

The following issues were discussed after the presentation.

- The systematics of the SDE is explained, including the basic price, basic energy price and correction sum. A question is asked what the consequences would be in theory if the average grey power price would exceed the basic sum in a certain year. Marc Streefkerk states that this difference would fully benefit the entrepreneur and the entrepreneur would not be cut on this. Another question is if the basic energy price cannot be terminated? It is regarded as a financial risk by banks and results in a higher interest on the loan. Marc Streefkerk states that this basic energy price will have to continue for budget reasons.
- For the new systematics, whereby the government will issue plots itself, the specific basic sum will be calculated per plot in four steps. In the SDE tender this basic sum will be published and the market parties will then have to bid under this specific basic sum. Step one is the average basic sum in a specific year, as stated in the Energy Agreement, step two is the basic sum referred to in step one, to be reduced by the costs (eurocent/kWh) for the cable infrastructure. Step three is dividing the average basic sum by ECN over the three designated areas Borssele, South Holland Coast and North Holland Coast. Step four is the last step and ECN calculates the correct basic sum for this purpose specifically for each plot. It is in the audience that step two is essential. It does not concern the sum in the Energy Agreement minus the costs of Tennet, but ECN must be specifically asked about the costs of building a wind project at sea, without the cable infrastructure. According to the audience this is a better and other approach.
- In the sheet with the planning it is stated that ECN will publish the basic sums by mid-August. Somebody asks whether this cannot be done any sooner. After all, this is a very important fact for market parties. People are afraid that too little time will remain to submit a good bid for the tender. Marc Streefkerk states that formally this cannot be done any sooner, because

the input from the plot decree is required for this. Perhaps it is possible that ECN can indicate the basic sum at an earlier stage.

- One of the discussion points is the minimum size of the wind park. At present a size of the wind park is envisaged of 350 MW. The audience states that it should be possible to build a slightly smaller park, because 350 MW cannot always be divided by the power of one turbine. For windmills of 5 or 7 MW the minimum is 350 MW, however for a 6 MW turbine this would be 348 MW (6x58), for example.
- The next discussion point is the maximum size of the wind park. Can an applicant also build a wind park of 370 MW, for example? The audience also refers to Gemini Wind Park as an example. According to the current starting points, the cable will only be used full time 30% of the time. Moreover, it was noted that this is an optimum. The larger the park, the lower the costs will be per kWh, however at a certain moment the park will be so large that an ever increasing part of the electricity cannot be purchased by Tennet anymore. This optimum will always depend on which turbine and rotor surface area will be chosen. It is not possible to state one specific size of the wind park for this. If two wind parks are connected to one station of TenneT, the question remains which of these two parks may supply the power on top of the standard capacity of twice 350 MW. The audience advocates a maximum flexibility in the connection conditions of TenneT, so that market parties themselves can calculate their optimum in this respect. It is also proposed to discuss these connection conditions of TenneT at a next workshop.
- The first tender for Wind Area Borssele will concern two plots of 350 MW. The audience is asked whether tenders for 700 MW can also be submitted, besides the bids for each plot of 350 MW. It is noted by the audience that if we would seek an as low tender sum as possible, this would mean that bids for 700 MW should also be possible. In the case that the bid per kWh for a park of 700 MW is on average cheaper than the two lowest bids of the two plots of 350 MW, the applicant of 700 MW will be the winner of the tender.
- It has been laid down in the Energy Agreement that a project must be completed within 4 years. Can this be further accelerated with the current systematics? In the audience it is stated that it certainly will not be speeded up. After all, the project only starts after the tender has been won, whereby everybody knows that there are many other restrictions that have to be considered. The ban on sinking piles for 6 months per year is perhaps the most well-known restriction. Moreover, it is only possible to sign an agreement with other parties after the tender has been won. It is also noted that the faster a project has to be realised, the greater the risk that this deadline is exceeded. This risk is included in the interest percentage by the banks, which worsens the business case.
- An implementation agreement was signed in the previous tender for Wind op Zee, in which a compulsory starting date was enforced through a fine of 2 million euros per month, up to a maximum of 20 million euros. What is preferred this time? It is stated in the audience that, as is the case in the previous subject, the greater the emphasis on speed, the more this will be at the expense of the tender sum.
- In the current SDE+ an own capital of 20% of the total investment costs is assumed. If this would be a lower percentage, the applicant must submit a declaration of intent of the bank, which shows that the bank is confident about the project. It is noted in the audience that these percentages are too high for wind projects at sea. The sums are so substantial that this means in practice that it is necessary to work together with several banks. The other

possibilities that are discussed are bid bonds and bank guarantees, whereby it is emphasised once again that bank certificates and bank guarantees are two different products.

- The current order in council of the SDE+ will be adapted as from 1 January 2015. This also has consequences for the wind parks at sea. For example, it is possible now that the SDE+ subsidy has five different starting dates within one windmill park. The wind factor has disappeared and is replaced by banking. Furthermore, it is obvious that the obligation that an applicant has a licence must be changed, because the licence is provided together with the order, according to the new systematics.
- Finally, the Advisory Group is mentioned. It includes all stakeholders and various matters can also be coordinated here. However, the audience states that this Advisory Group has an unclear staffing. This is because branch organisations as well as individual companies are represented in this advisory group, whereby it is unclear whether the individual company is a part of the Group for their own interests or on behalf of a branch.

Questions after the feedback from the workshops on SDE+ and on ecology:

- It will be decided later if there can be flexibility in number of MW's within the 350 MW.
- If it will be possible to bid for 700 MW or 350 MW, the tender rules must be clear how it is decided which company wins the tender.

Conclusion

The chairman thanks those attending for their contribution and feedback. In November and December two more workshops will be organized. The invitation will be sent in the forthcoming weeks.