



Report 5th workshop tender Borssele, December 15, 2014

Opening and presentations

The fifth 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. Further the first revision of the Technical Project Description was presented. The third subject of the meeting was the subsidy scheme. The presentations will be published on the website of RVO.nl after the meeting.

After the presentations two parallel sessions took place. A short summary of the discussions:

Workshop SDE+ subsidy scheme

Mr. Marc Streefkerk of the Ministry of Economic Affairs has given a presentation on the progress of the new SDE+ subsidy scheme. The SDE+ tender Wind at Sea will be published end of September 2015 and will open in December 2015. In this tender two windfarm sites will be tendered with a total capacity of 700 MW. In general each windfarm site will be 350 MW. However if the surface of the two sites differs significantly, it is possible that one site will be bigger than 350 MW and the other smaller than 350 MW. Marc Streefkerk used in his presentation the example of two sites of 340 and 360 MW. For the applicants it is not necessary to build a windfarm exactly this size. It will be possible to build a windfarm bigger than the standard. TenneT will publish in 2015 the exact conditions for the maximum size of a windfarm. In the presentation of Marc Streefkerk a percentage of overplanting of 5 until 10% was mentioned.

Minimum amount of MW per site

The SDE+ tender is more focused on the minimum size of the windfarm. The applicant has to realize a windfarm close to the standard size. For example if the windfarm site has a standard size of 340 MW and the applicant will use 6 MW turbines, the minimum size must be 56 wind turbines of 6 MW (336 MW). This calculation can be put in a formula: The minimum size must be : Standard size + 1 MW - the size of one turbine. In this example, this would be 340 MW + 1 MW – 6 MW = 335 MW. Therefore the applicant has to build at least 56 wind turbines of 6 MW = 336 MW. If an applicant will use different wind turbines, the smallest turbine is used in the formula.

Lowest price per kWh will win

In the SDE+ tender it will be possible to place a bid for the two separate sites but also a bid for the 700 MW in total. The winner of the tender is the cheapest bid on the 700 MW except if the weighted average of the two separate bids for the two separate sites are cheaper. In the example used by Marc Streefkerk the weighted average bid is calculated as follow:

(Price A * 340 MW of site A + Price B * 360 MW of site B) / 700 MW.

How much time is needed for preparation of a good bid?

The SDE+ tender will open in December 2015 but is it not yet decided until what time the tender will close. Marc Streefkerk has asked the attending people how many months are required for preparation of a good bid, after the moment all site data is available (first of July 2015 according to current planning). Some people said 4-6 months was sufficient, but others claimed they would need at least 9 months.

What period is needed to build a windfarm of 350 MW and 700 MW?

After the SDE grant is given a windfarm of 350 MW has to be realised within 4 years and a windfarm of 700 MW within 5 years. Marc Streefkerk has asked the attending people what they think of this. There were no comments on the period of 4 and 5 years. Some people said that the starting point should not be the date of the SDE grant, but the date the permit for building the windfarm is irrevocable. Other people said that even the permit is not irrevocable a lot of work can be done before this date.

Monitoring of the windfarms

In the UK a special monitoring programme is used called 'Sparta'. Marc Streefkerk has asked the attending people what kind of monitoring programme should be in place for Borssele. Nobody attending the meeting had a problem with the Sparta method, but because the meeting had to end the suggestion of the people was to discuss the monitoring with the TKI Wind op Zee.

Workshop site and project description

Mr. Maarten Timmermans of BLIX and Mr. Ruud de Bruijne of the Netherlands Enterprise Agency (RVO.nl) gave a presentation on the first revision of the Site and Project Description (previously named Technical Project Description). This report will contain a general introduction to the deployment of 3,500 MW offshore wind power in the years ahead, an introduction to the Borssele wind farm zone, an overview and guidance through all desk studies, the expected bandwidth in the consenting procedure and some characteristics of the electrical infrastructure. The Site and Project Description will be published shortly after the workshop. The following issues were discussed after the presentation:

- Concerning the geophysical survey: devices will be taken to a depth of 40 meters or more in certain layers if necessary.
- It will be reconsidered if it is possible to provide survey data before certification. This would be appreciated by the industry because they need the data as soon as possible for their planning.
- The certification will be according to DNV-OSJ101 or other industry standards.
- Data provided by RVO.nl can be input for FEED studies. In addition, the winner of a tender can do more detailed surveys on when specific locations for the foundations and infield cables routes are known.
- On wind resource: RVO.nl is planning a measurement campaign in the Borssele wind farm zone, with a floating LIDAR. The measurements will last for at least a full year in an (almost) undisturbed situation. Nearby ECN is doing measurements with a fixed LIDAR on Lichtschip Goeree. Data will be made available every month. There also will be a floating LIDAR close to the Belgian parks to measure wake effects. The information on wind data from fixed LIDAR's provided by ECN is public. It is up to the developers if they want to use these data.

- The developers will have to do their own wind resource assessment based on available wind data and on modelled wake effects of the Belgian windparks and of other (future) wind farms in the Borssele wind area.
- On cables and substations: the subsidy is based on the new system with the electrical infrastructure of TenneT. Although there might be other ways in future to transport the energy to shore, it is mandatory to use the infrastructure of TenneT.
- The geological desk study is limited due to a lack of survey data. It will be necessary to do further surveys (as foreseen).
- It is expected that there are UXO's in the area (planes or bombs). It is possible that they move due to the dynamic character of the seabed. Therefore it is necessary to undertake a dedicated UXO survey short before offshore works. The assessment and planned geophysical survey will provide information on the scale of presence of UXO's. It is obligatory to inform the Dutch Navy when UXO's are found. It will need to be confirmed who will bear the costs of removing the UXO's. It is not yet clear if the developer is allowed to change the configuration of the park by placing turbines differently, in order to avoid an UXO. These issues will be investigated.
- Archeology: it is not likely that there will be prehistoric sites in the Borssele area. It is possible that there are historic wrecks, but they are not yet found. However it is possible that something will be found during the geophysical survey. Airplanes from world war II are also considered historic and are subject to the regulations of the Cultural Heritage Agency (RCE).
- EIA: part of the information from the desk studies will be used in the EIA. The industry repeats their request to provide as much data as soon as possible, including GIS-data, in order to enable the industry to prepare for the tender. The desk studies will be published on the website soon after this meeting. On the involvement of the industry in the EIA process: the policy framework on ecology (KEC) is currently under development. Representatives of the wind industry were consulted during workshops on ecology. In January and February more workshops (underwater noise) will be organized. The industry was also consulted on the bandwidths that are being investigated in the EIA.
- In the EIA a bandwidth of 1000 to 3000 KJ will be investigated. The biggest hammer that is used currently for foundations is 3000 KJ. The industry says that a 4000 KJ hammer is currently being developed. In future possibly 5000 KJ hammers will be developed. Therefore 4000 KJ is a better guess.
- An important issue for the industry is when the TenneT substations will be available. In the course of 2015 there will be more information on the exact planning. This issue was also discussed during an expert meeting that TenneT organized with the market two weeks ago.
- The industry was invited to check the desk studies on the website and to inform RVO before the end of January if any information is missing. If additional information is needed RVO can include this in the update of studies after the geophysical and geotechnical surveys.
- The 2nd tender will be published in the second half of 2016.
- Cables: the position of cables will also be investigated in the geophysical survey. Cable owners will be consulted, among others, on cable crossings. In the next workshop (early March) there will be more information available on cables. The possibilities to move the cables will also be discussed with the cable owners. The possibilities and consequences are now being identified. It will take about two years to translocate a cable. The information that is necessary for the bidding phase will be available in time.
- The safety zone is 500 meters for pipelines and 750 meters for telecom cables. If a developer wants to deviate from this, he will have to negotiate with the permit holder.

- The LIDAR will measure wind speeds at a height at least as high as the wind turbines. In the opinion of the representatives of the industry this means higher than 100-110 meter.
- TenneT intends to choose 66 KV and not 33 KV for the electrical infrastructure.
- RVO asked the stakeholders if they have interest in meetings with the suppliers of the site investigation studies. This would be appreciated by the wind industry, especially on topics like geophysical and geotechnical surveys, wind measurements and UXO's, including the legal framework. The industry asks to send the reports three weeks before such a meeting so they can discuss it with their experts and prepare for the meeting. If possible the different meetings could be planned for an entire day, with different subjects to discuss. This would make it easier for parties that will have to travel.
- The Ministry of Economic Affairs stated that the winner of the tender doesn't have to pay for the surveys that were done prior to the tender. The Ministry will pay for the site investigation(s), winners of tender(s) do not have to remunerate the costs.

Plenary

- After the workshops Marc Streefkerk gave a short impression of the discussions in the workshop on SDE and Bob Meijer of the discussions in the workshop on the technical project description.
- Ruud de Bruijne RVO.nl asked the attendees to study the information that will be published on the website RVO.nl in December and to report any missing information before the end of January (by email). The next revision of the Site and project description will be published as soon as possible; it is now planned for the third quarter of 2015.

The chairman thanks those attending for their contribution and feedback. The next meeting will be in March 2015.